APPENDIX F

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION, *COMPREHENSIVE ENERGY STRATEGY*

[UNDER DEVELOPMENT – NOT INCLUDED]

APPENDIX G

DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION, *STUDY OF THE IMPACT OF THE REGIONAL INDEPENDENT SYSTEM OPERATOR ON CONNECTICUT RATEPAYERS AND THE NEW ENGLAND AND STATE WHOLESALE ELECTRIC POWER MARKETS*

May 25, 2012

Study of the Impact of the Regional Independent System Operator on Connecticut Ratepayers and the New England and State Wholesale Electric Power Markets

DRAFT FOR PUBLIC COMMENT

Prepared pursuant to Section 35 of Public Act 11-80

I. INTRODUCTION

The Department of Energy and Environmental Protection (DEEP, or "the Department") provides this study regarding the impact of the regional independent system operator on the New England and state wholesale electric power markets in accordance with Section 35 of Public Act 11-80, An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future. Specifically, Section 35 requires DEEP to submit a report to the joint standing committee of the General Assembly having cognizance of matters relating to energy, including "(1) a review of the accountability the [Independent System Operator for New England] to Connecticut ratepayers and energy policymakers, (2) consideration of strategies and mechanisms that may mitigate any adverse impacts Market Rule 1 may have on wholesale generation prices in Connecticut and New England and may reduce Connecticut's reliance on the wholesale power market, including, but not limited to, long-term contracts, (3) consideration of the costs and benefits associated with participating in said Regional Transmission Organization (RTO) and any potential benefits of joining another RTO or operating outside of the RTO structure; (4) an examination of the framework within the Federal Energy Regulatory Commission that has contributed to the state's high rates, and (5) consideration of methods to foster greater transparency in any such system."

DEEP is committed to ensuring that Connecticut ratepayers are represented effectively before regional bodies and the Independent System Operator of New England (ISO-NE) and the Federal Energy Regulatory Commission (FERC). This report provides an overview of those institutions;

the policies they oversee that affect Connecticut ratepayers; and the means by which DEEP and its counterparts in other New England states work to influence the development of those policies. The ultimate goal of DEEP's involvement with ISO-NE and FERC is to assure that Connecticut, and DEEP, have a strong role in determining what is in the best interest of Connecticut's citizens and ratepayers. This report will inform that effort, and advance the goals of the Department as set forth in Section 1 of Public Act 11-80.

After concluding this report, DEEP intends to conduct further study of some of the policy issues highlighted here. DEEP believes that the lack of consumer cost accountability in ISO-NE's mission statement requires additional analysis of the wholesale power markets outside of what ISO-NE and FERC have addressed to date. Within available resources, DEEP will engage experts in the fields of auction mechanics and wholesale energy markets to study the current markets, and determine whether there are alternatives that could improve efficiency, reduce ratepayer costs, and improve the balance of market objectives. DEEP will seek to engage ISO-NE, FERC, and other New England states these evaluations. Upon completion of its analysis, DEEP will further update this report.

II. BACKGROUND

A. ISO-NE HISTORY[1]

The Independent System Operator of New England, Inc. (ISO-NE) is an independent, non-profit Regional Transmission Organization (RTO) created by FERC in 1997 to ensure reliability and establish and oversee competitive wholesale electricity markets in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. ISO-NE is governed by an independent, 10-member board of directors with expertise in financial markets, law, and electric power operations and regulation. ISO-NE board members have no financial interest in any company doing business in New England's electricity markets.

At the time of ISO-NE's creation, Transmission Owners (TOs) who had previously run the grid through the New England Power Pool (NEPOOL) were asked to voluntarily transfer control of their assets to ISO-NE through an Open Access Transmission Tariff (OATT) and Transmission Owner Agreement (TOA). The OATTs and TOAs are approved by FERC. The TOA also governs a TO's rights to withdraw from ISO-NE. The Connecticut TOs are: Connecticut Municipal Electric Energy Cooperative, the Connecticut Light and Power Company (through its agent Northeast Utilities Service Company), and the United Illuminating Company. ISO-NE can develop and file changes to its tariff (including to the ISO-NE market rules) only by seeking FERC approval.

FERC's intent in establishing RTOs was to create a level playing field for competitive markets, ensuring equal access to transmission grids and encouraging states to require utilities to sell off power plants and gradually eliminate cost-of-service rates set by regulators in favor of prices determined by the markets. In its Order 2000, FERC made clear that RTOs must be independent

[1] For more background on ISO-NE, see report commissioned by CGA in 2010 at this address: http://cga.ct.gov/2010/rpt/2010-R-0387.htm

of the market and completely neutral in order to run the power grid system and oversee the development of the wholesale market. Absent from Order 2000 is a discussion addressing the role of state utility regulators or policymakers in the formation and governance of RTOs[2].

State regulators (at the time of ISO-NE's creation) largely agreed with FERC's vision for an RTO. Given the potential for the exercise of market power by certain market participants, it was essential that the extent of market power in the electricity market in New England be properly defined, and appropriate monitoring and mitigation measures be put in place for the newly deregulated environment adopted in the region. State officials and regulators in New England have long been concerned, however, by the fact that RTOs are regulated only by FERC and not accountable to any state authority in the region.

Market Rule 1 is set forth in Section III of ISO-NE's Transmission, Markets & Services Tariff, which establishes the rates, terms and conditions for transmission, market, and other services provided by ISO-NE. Specifically, Market Rule 1 governs the operation of New England's wholesale electric power markets, and contains detailed information on pricing, scheduling, offering, bidding, settlement, and other procedures related to the purchase and sale of electricity.

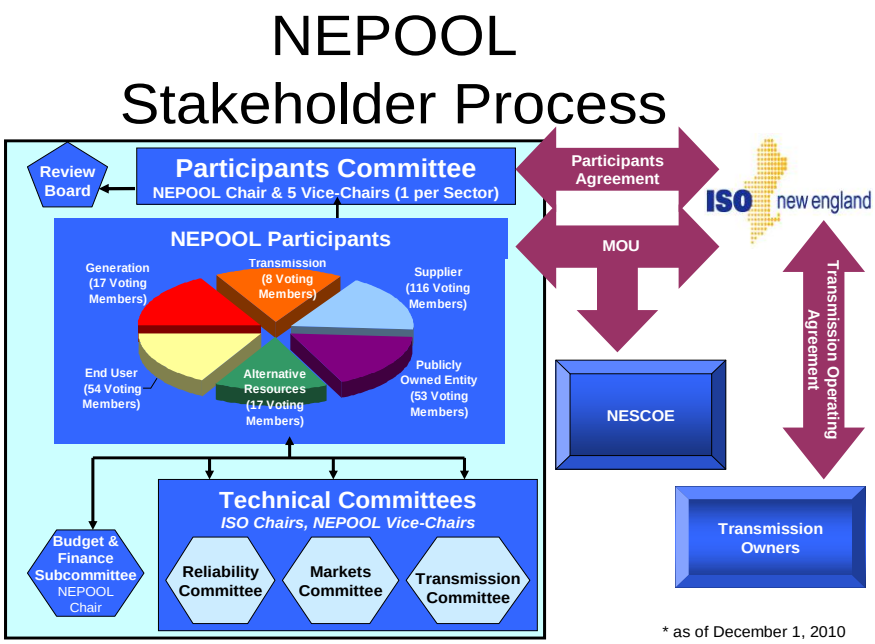
ISO-NE makes policy through its Board of Directors and by working with NEPOOL, which today comprises over 400 participants including generators, utilities, marketers, public power companies, and users. ISO-NE files all of its proposals at FERC for approval and adoption. NEPOOL is no longer a governing body, but serves in an advisory role to ISO-NE and establishes its support or objection to ISO-NE's proposals by actively participating during the stakeholder process or filing briefs and objections at FERC. The New England states are welcome guests at ISO-NE meetings and are encouraged to express their concerns at all ISO-NE and NEPOOL committee meetings. State regulators and policymakers who attend such meetings can also object to ISO-NE proposals during the stakeholder process but do not have a vote at these meetings. Consequently, state concerns are not always given high priority. States do have the ability to file objections with FERC over ISO-NE proposals for the wholesale market. Connecticut has found it necessary at times to invest substantial time, money, and effort in order to take a proactive role at FERC and litigate serious concerns. ISO-NE has shown receptiveness to suggestions for improving state involvement in the ISO-NE governing process, and DEEP is hopeful that the model will move toward a different approach to state relations.

B. COMMITTEE STRUCTURE

Under current ISO-NE arrangements, NEPOOL manages a technical committee structure that supports the stakeholder process and development of the wholesale electricity markets in New England. This participant/stakeholder process for voting on ISO-NE matters is divided among four principal committees: the Participants Committee, Markets Committee, Reliability Committee, and Transmission Committee. The committee process functions through a labyrinth of meetings and calls on weekly and monthly schedules held throughout New England but mainly in Massachusetts, as a central location for the region. The process includes the review of often voluminous documents, a series of presentations by ISO-NE and stakeholders, day-long

[2] FERC does address the role of the states with respect to siting issues and to underscore that it is not seeking to infringe on state's rights with respect to siting as a result of Order 2000.

discussions and debates, usually occurring over a number of months, culminating in stakeholders voting to approve or reject proposals. See figure below, courtesy of NEPOOL.



New England states are encouraged to participate informally with the ISO-NE/NEPOOL process as non-voting members in the ISO-NE/NEPOOL structure, by helping to clarify issues in the deliberative process and voicing support or objection to issues that come before the different committees. The New England states generally have some staff and commissioner-level representation at most meetings. The states have also participated in the process by making recommendations to meeting agendas, chairing ad-hoc committees, giving presentations before committees, and working as key point people in settlement discussions at FERC. The table below provides a brief summary of issues that Connecticut is monitoring and that fall under the jurisdiction of ISO-NE/NEPOOL's four principal committees.

1. Markets Committee

- Forward Capacity Market (FCM) Redesign. Reflects a broadly supported compromise approach that provides time for the region to explore longer terms improvements to FCM that may better align with the region's needs and that address the requirements set forth by FERC in its April 13, 2011 Order on Paper and Order on Rehearing. The recommendations address: offer price mitigation/delist bids/renewable exemptions/nonbinding static delist bids and non-price retirement bid options.

- Forward Capacity Market Planning. This process will determine how rejected delist bids will work into planning procedure. ISO-NE will determine the options for replacing units needed for reliability.

- Load Constitution and Demand Response. ISO-NE is considering further revisions to Market Rule 1 to integrate the decision on whether to implement load reconstitution into the proposed redesign of FCM cost allocation. This is an issue that was pushed off from being decided a few years ago while more experience was gained. It is an issue of cost allocation among the states.

- Demand Response (DR). ISO-NE proposes that active DR with a capacity supply obligation should have to offer into the Day-Ahead and Real-time markets. This approach may level the playing field among different resource types and produce more efficient energy and capacity price signals.

- Alternative Technology Regulation Market Pilot Program. An ISO-NE pilot commenced in 2008 to determine how emerging technologies can supply frequency regulation service.

- IRIS-InterRegional Interchange Scheduling. A long-term project begun in 2010, to be completed in two-phases to improve economic coordination and reduce seams with NY. It is proceeding through the Participants Committee.

2. Participants Committee (PC)

- Key Governing Committee. The PC receives reports and takes action on committee and subcommittee maters relating to regional wholesale power and transmission matters that are pending before the region, federal bodies and the courts.

- Strategic Planning Initiatives. This initiative will be conducted in phases over the upcoming 18 months. It has the potential to dramatically change the market structure and price signals in the market. The issues presented thus far for review include: non-transmission alternatives, retirements of fossil-fired generators and integration of a greater level of variable resources, increased reliance on natural-gas fired capacity, resource performance and flexibility.

- Capacity Cost Rate Review. ISO-NE's proposal to hardwire the current Capacity Charge component on the VAR rate and remove language referring to the compliance obligation to update the rate.

- Eastern Interconnection Planning. EIPC and EISPC - The Eastern Interconnection States Planning Council.

3. Transmission Committee (TC)

- Non Transmission Alternatives (NTAs). Currently includes the Greater Hartford Study and Assumptions –ongoing study.

- FERC Order 1000. FERC Order 1000 concerns the process for identifying public policy appropriate to consider in the regional planning process and cost allocation of transmission projects that meet state goals (including RPS). Filings are required in Fall 2012.

- Blackstart Program Redesign. Due to new NERC requirements and associated costs requirements for the region to maintain sufficient blackstart units (units which can come on quickly). Discussions revolve around cost allocation and recovery process.

4. Reliability Committee (RC)

- Review of Greater Hartford Portion of NEEWS. As with the review of NEEWS, this committee provides input on any plans for additions to, retirements from, or changes to the grid system and input on the annual Regional System Plan.

- Southwest Connecticut Studies. Currently ongoing studies: 2013/2014 ARA (Annual Reconfiguration Auctions) LRA-local resource adequacy; TSA–transmission security analysis; MCL–Maine Capacity Limit.

- Installed Capacity Requirements. ISO-NE's regional development of generation and demand resources that are needed to meet resource adequacy requirements (the minimum amount of capacity the region will require).

In addition to these four committees, Connecticut also participates in:

- *Planning Advisory Committee (PAC)* – The PAC develops the annual Regional System Plan, conducts economic studies, considers resource adequacy issues and emissions regulations. Is currently conducting Energy Efficiency in Planning – a collaborative process among ISO-NE, the states and the New England Energy Efficiency Partnership (NEEP) to discuss data collection for the Regional Energy Efficiency database (REED) and ISO-NE's study of a revised methodology for inclusion of energy efficiency forecasts within the load forecast.

- *Power Supply Planning Committee* – Includes a review of all Operation No. 4 events (OP 4)- incidents that require ISO-NE to implement capacity deficiency actions to support the grid - analysis, performance and audits; Installed Capacity Resource development studies and emissions analysis.

- *Consumer Liaison Group* - Stakeholder forum includes ISO-NE, regional consumer organizations and advocates to exchange information about the economic impacts of New England's bulk power system and wholesale electricity markets.

States can choose to work independently or in collaboration with other regional entities on issues which confront the region, most notably with the New England Conference of Public Utility Commissioners (NECPUC), and more recently with the New England States Committee on Electricity (NESCOE). However, there are times when Connecticut interests are not aligned with those of other states or regional entities, and Connecticut is forced to incur hefty legal and consulting costs to be heard more effectively on critical issues to the state.

There are some encouraging signs that FERC has begun to acknowledge the gap in RTO's decision making with respect to consumer interests and the needs of the states to further their own public policy goals with respect to generation and the use of renewables. There are several ongoing initiatives centered on soliciting consumer interest and incorporating the public policy

goals of the states into the long-range planning functions of the ISO-NE. This shift in thinking has spurred the creation of the Consumer Liaison Group and is evidenced by the recent FERC Order 1000.

C. THE ROLE OF FERC

Most utilities provide electricity to both wholesale and retail customers. The retail sale of electric energy is regulated on the local and state level, but the wholesale side is regulated by the Federal Power Act which guides FERC in its jurisdiction and determination of wholesale rates. Specifically, FERC is charged with:

- Regulation of wholesale sales of electricity and transmission of electricity in interstate commerce
- Oversight of mandatory reliability standards for the bulk power system and for gas transportation
- Promotion of a strong national energy infrastructure, including adequate transmission facilities
- Regulation of jurisdictional issuances of stock and debt securities, assumptions of obligations and liabilities, and mergers

Public utilities and RTOs must file a request with FERC for adoption of any proposed changes, mergers, rates, terms, and conditions which affect electricity transmission and wholesale electricity sales in accordance with Section 205 of the Federal Power Act. FERC can accept, reject, suspend, or order for further examination of any such filings by the utilities and RTOs under its jurisdiction. It can choose one or a combination of the above measures when it rules on a matter. Parties who want to complain or object to a filing at FERC are entitled to do so pursuant to section 206 of the Federal Power Act.

FERC's standard of review under either a 205 (utility) or 206 (other parties) proceeding remains the "just and reasonable and not unduly discriminatory or preferential" standard. States must file a 206 complaint if they want to be heard, and would carry the burden of proving that a filed rate does not meet such standards. This is a difficult hurdle to overcome because filed rates are presumed just and reasonable. FERC will only consider alternatives if the filed rate is unjust and unreasonable. FERC does not weigh alternatives for the best solution. As a result, most of the ISO-NE's proposals are approved by FERC over the protests of state regulators.

D. MAINE STUDY

To adequately consider the costs and benefits associated with participating in the ISO-NE market system, and any potential benefits of joining another Regional Transmission Organization or operating outside of the existing Regional Transmission Organization structures would require an in-depth review of legal and technical ramifications. Such a review would also be very costly to undertake and would require significantly more time and resources to perform than has been allocated for this report under P.A. 11-80.

The State of Maine recently conducted an analysis of the costs and benefits of participating in ISO-NE. The report was prepared by the Maine Public Utilities Commission, in response to direction from then-Governor John E. Baldacci to determine costs and benefits and legal options for directing Maine TOs to withdraw from ISO-NE, and to examine other options for providing services currently provided by ISO-NE. The report took over two years to complete.

In an Interim Report issued on January 16, 2007, the Maine PUC observed that significant inequities exist in the RTO's transmission cost allocation system and the pricing of generation services, and that there are no insurmountable legal, economic, or technical barriers to Maine TOs withdrawing from ISO-NE. However, the Interim Report concluded that State of Maine is limited in its ability to direct such a withdrawal over the objections of the utilities, and any such withdrawal would be subject to approval by FERC. The Interim Report proposed three reasonable alternatives to continued participation in ISO-NE: (1) formation of an independent Maine/New Brunswick transmission organization; (2) development of a stand-alone Maine/ITC; and (3) ISO-NE market reform.

The Final Report, issued on January 15, 2008, discussed the pros and cons of Maine Transmission and Distribution Companies remaining with ISO-NE. Benefits provided to Maine consumers under current status quo arrangement, including:

- A platform for retail competition;
- A regional approach to energy resource planning;
- Sophisticated dispatch protocols and market systems that optimize generation efficiency;
- A liquid market with many buyers and sellers; and
- Access through ISO-NE to a vast array of engineering and economic and regulatory professionals which can be deployed in a manner that would be difficult to replicate in smaller systems.

"Serious defects" in the status quo arrangement, include:

- Electricity supply prices are rising, particularly in the Northeast;
- Electricity supply prices are volatile, aggravating price pressures;
- Energy security is at risk;
- Maine consumers are paying more than their fair share of regional costs;
- Decisions about Maine's electricity industry have moved to Washington; and
- Consumers are left out of the increasingly influential regional and federal decisionmaking process.

At the conclusion of their analysis, the Maine regulators determined that the benefits to Maine of remaining in a regional market operated by ISO-NE outweighed any benefits from withdrawing from the regional wholesale market. The report identified several legal issues—involving the U.S. Commerce Clause, existing FERC orders, and other requirements—that would subject the state to costly and lengthy legal battles if it were to pursue a course of withdrawal from the regional market.

III. OPTIONS FOR CONNECTICUT

The Maine study clearly demonstrates that forming a new market structure may expose ratepayers to several risks and may not yield significant savings from a total retail electricity perspective. If the legislature wishes to move forward with further action around ISO-NE involvement, DEEP believes that a more detailed cost-benefit analysis is required to determine the magnitude of any long-term savings to a withdrawal from ISO-NE. Absent further study, DEEP proposes to work within the current framework to diligently pursue the state's policy priorities and to be more engaged at the regional and federal level. Specifically, DEEP would work to achieve a better outcome for ratepayers through the following steps:

- Engage FERC in regional discussions with the New England states on the redesign of wholesale markets;
- Commit sufficient funds to study the latest market designs if desired by the legislature;
- Engage FERC more actively, and have a united presence in coordination with our Attorney General and the Office of Consumer Counsel to more effectively impact the conversations at FERC; and
- Work through regional bodies to coordinate procurements and/or persuade ISO-NE to fully vet out-of-market approaches including bi-lateral contracts and to incorporate energy efficiency into ISO-NE's long-term planning.

A. AREA FOR FURTHER ENGAGEMENT BETWEEN ISO-NE AND THE STATES

DEEP believes that promoting the development of competitive wholesale and retail markets is an important goal of the state. The problems that have emerged over the years will be more seriously scrutinized and challenged going forward. Connecticut's objectives will include: 1) advocating more vigorously and intelligently in regional discussions to preempt any decisions that will adversely affect the state and its ratepayers; 2) creating better transparency in the structure of how these markets are created; and 3) proactively convening discussion around potential reforms to establish greater balance and a more level playing field with regards to Market Rule 1. DEEP strongly believes there are opportunities occurring in which it can begin its stated course of action to actively create a new presence for regional discussions both at ISO-NE and FERC.

B. ISO-NE GOVERNANCE

DEEP has concerns regarding the governance of ISO-NE. In the current ISO-NE governance structure, there is little accountability to the ultimate end-users of the grid, the New England electric ratepayers. ISO-NE is governed by a self-perpetuating 10-member Board of Directors who meet annually to review operations during the immediately preceding year, to elect directors and officers, and to elect the Chair of the Board of Directors. The board also meets regularly and has subcommittees such as the Board Markets Subcommittee that ISO-NE briefs and seeks input from on major issues, especially where there is dissent in the region. Pursuant to ISO-NE's bylaws, NEPOOL, and the New England Conference of Public Utility Commissioners

(NECPUC) serve on a Nominating Committee for Board recruitment. However, ISO-NE practice has been to not allow for current state regulators or policymakers to sit on the Board due to potential conflicts.

Board meetings are closed and therefore, not open to the states or NEPOOL members. The Department believes that in practice, the public interest is sometimes lost in such a process. The Board of Directors does meet annually with the states for an informal discussion to interact with state regulators and policymakers. DEEP does not consider such structure to be consistent with Connecticut's commitment to transparency, and the process does not enable the state to voice its concerns and that of its ratepayers effectively to the Board.

DEEP recommends continued examination and discussion on ISO-NE governance with ISO-NE, the states, and NESCOE to further resolve these concerns. Given the many issues that ISO-NE examines on a yearly basis that impact Connecticut and its ratepayers, DEEP encourages ISO-NE to consider further scrutiny of its governance to increase transparency of its processes. DEEP also feels that ISO-NE should broaden its mission to include the public interest and impact on ratepayers to ensure greater accountability to its ultimate end-users.

C. FORWARD CAPACITY MARKET

In New England, the Forward Capacity Market (FCM) provides opportunities for existing and new generation, Demand Response (DR), and imports to compete in a single price auction format to provide the capacity resources the region needs to meet future reliability requirements. Resources must qualify, clear in the auction, and then perform when called upon by the ISO-NE to be eligible for capacity payments. FCM auctions are conducted in a series of annual auctions, and reconfiguration auctions.

Based on FERC's ruling from earlier this year, the market rules for ISO-NE's FCM will need to be revised and rewritten. The major concern for Connecticut and many of the states is the ability to carry out state policies, particularly with respect to renewables and meeting Renewable Portfolio Standards (RPS). For state policymakers and regulators, it is crucial that the states be able to carry out their respective RPS goals without potentially requiring ratepayers to double-pay for the capacity that is associated with their legitimate policy goals. DEEP has considered several recommendations that it will advocate in regional discussions. Connecticut understands that eventually new resources are needed in the market, and is concerned that without changes, the higher priced units will continue to set the price for the entire 30,000+ MW's of Installed Capacity Resources. ISO-NE should explore a way to pay different prices to resources that provide different types of service. Coordinated Procurements to help meet renewable energy goals at lowest "all-in" delivered cost should also be explored so as not to exclude those resources from the FCM.

D. STRATEGIC PLANNING

ISO-NE, the states, and New England stakeholders are evaluating several key risks that will impact the region's power system and wholesale electricity markets. Some of the issues ISO-NE will be addressing through this initiative involve both near-term risks and long-term risks, including:

- Resource performance and flexibility
- Increased reliance on natural gas-fired capacity
- Retirement of units
- Integration of a greater level of variable resources
- Alignment of markets and planning

This initiative provides Connecticut and other policymakers from the region an excellent opportunity to identify problems with and to shape solutions to a broad range of fundamental issues for our ratepayers. These solutions will be critical to bringing about reforms in the region if ISO-NE is willing to engage in a serious and thorough examination of these and other issues. This initiative is unfolding through ISO-NE's Participant Committee process and is slated for first quarter 2012 through 2013. DEEP commits to engage in this process.

E. NON-TRANSMISSION ALTERNATIVES STUDIES

Connecticut is one of several New England states that requires transmission owners to provide Non-Transmission Alternative (NTA) analysis to state siting authorities. NTA studies address potential areas of concern by evaluating the local transmission system, creating a needs assessment, and presenting proposed transmission projects while soliciting for alternatives to select the most cost-effective solutions. This process is then submitted to ISO-NE to review any adverse impact analysis and to ensure a seamless integration into operations and markets. However, the current process leaves a state with little time to review all the information submitted so that it can thoroughly evaluate whether any other alternatives would be viable or preferable to the proposed transmission project. NESCOE has been leading a discussion to ensure that states have the data they need to participate in these studies when they need it, not after it becomes too late for any alternatives to become viable.

F. COORDINATED RENEWABLE PROCUREMENT

NESCOE has also been spearheading an initiative at ISO-NE to explore a means to help the states meet their respective renewable energy goals at the lowest "all-in" delivered cost. Currently, DEEP is evaluating the issues involved with a coordinated renewable procurement, and will provide its comments and actively engage in this process as it develops.

G. FERC ORDER 1000

Over this past summer, FERC issued Order 1000, which addresses the process for identifying public policies of the states and cost allocation methodology for any projects that may be included in a regional planning process to satisfy public policy objectives. The state's concern is whether deviating from the current planning process and cost allocation methodology utilized in the region will place ultimate authority over the process and decision-making in the hands of a federal agency and not within the region where it belongs. In addition, the Malloy Administration has announced clear and aggressive goals for the state concerning the promotion of renewables and energy efficiency as part of the administration's energy agenda. Connecticut

must be vigilant that any changes in federal law do not negatively impact the interest of the state and costs to ratepayers. DEEP will be actively engaging with other states in this discussion at ISO-NE and at FERC.

IV. CONCLUSION

DEEP will continue to explore auction redesign options that would more effectively balance the goals of maintaining a competitive wholesale market with necessary safeguards to ensure fair and equitable outcomes for ratepayers. Several auction design options could be further analyzed in a subsequent study to compare and contrast alternatives and further deliberate on potential changes to the current regional system. DEEP is currently evaluating this option as a potential next step. This report concludes that Connecticut needs to engage ISO-NE more substantively on a range of key issues, including the Forward Capacity Auction, FERC Order 1000, ISO-NE's Strategic Initiatives, as well as Market Rule 1. DEEP believes that this is a particularly unique and favorable moment for Connecticut to engage and create a dialogue around the state's concerns, given the reorganization of energy entities in the state, a strengthened alignment among the Office of Consumer Counsel and Attorney General's Office, and the issues presently before ISO-NE.

APPENDIX H

CONNECTICUT LIGHT & POWER, *2012 FORECAST OF LOADS AND RESOURCES*

Connecticut
Light & Power

The Northeast Utilities System

2012 Forecast of Loads and Resources

For the Period 2012-2021

March 1, 2012

Northeast Utilities

107 Selden Street, Berlin, CT 06037

Northeast Utilities Service Company
P.O. Box 270
Hartford, CT 06141-0270
(860) 665-5000
www.nu.com

March 1, 2012

Mr. Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: CL&P 2012 Forecast of Loads and Resources for the Period 2012-2021

Dear Mr. Stein:

Submitted herewith, on behalf of The Connecticut Light and Power Company ("CL&P" or the "Company"), are 20 copies of the Company's 2012 Forecast of Loads and Resources, as required by Section 97 of Public Act 11-80.

This Forecast is available for review by the public during normal business hours at the principal office of Northeast Utilities Service Company, Regulatory Planning & Policy Department, 107 Selden Street, Berlin, Connecticut. Arrangements for viewing the Report can be made by calling Ms. Tyra Anne Peluso at (860) 665-2674.

Please contact me (860-665-5967) if you have any questions with respect to this filing.

Very truly yours,

Christopher R. Bernard

Christopher R. Bernard
Manager, Regulatory Policy & Planning
Northeast Utilities Service Company
As Agent for CL&P

Enclosure

cc: Kimberley J. Santopietro, PURA

Table of Contents

List of Acronyms

"ARRA"	American Reinvestment and Recovery Act of 2009
"C&LM"	Conservation and Load Management
"CAGR"	Compound Annual Growth Rate
"CCEF"	Connecticut Clean Energy Fund
"CEAB"	Connecticut Energy Advisory Board
"CEEF"	Connecticut Energy Efficiency Fund
"CL&P"	The Connecticut Light & Power Company
"CSC"	Connecticut Siting Council
"CMEEC"	Connecticut Municipal Electric Energy Cooperative, Inc.
"DPUC"	Department of Public Utility Control
"DSM"	Demand Side Management
"EDC"	Electric Distribution Company
"ERO"	Electric Reliability Organization
"FCA"	ISO-NE Forward Capacity Auction
"FCM"	ISO-NE Forward Capacity Market
"FERC"	Federal Energy Regulatory Commission
"FLR"	Forecast of Loads and Resources
"FMCC"	Federally Mandated Congestion Charge
"IRP"	Integrated Resource Plan
"IPR"	Intermittent Power Resource
"ISD"	In-Service Date
"ISO-NE"	Independent System Operator - New England
"kW"	Kilowatt or 1,000 Watts
"MW"	Megawatt or 1,000,000 Watts
"NEEWS"	New England East — West Solution
"NERC"	North American Electric Reliability Corporation
"NTA"	Non-Transmission Alternative
"PA 05-01"	Public Act 05-01, An Act Concerning Energy Independence
"PA 07-242"	Public Act 07-242, An Act Concerning Electricity and Energy Efficiency
“PA 11-80”	Public Act 11-80, An Act Concerning the Establishment of the Department of Energy and Environmental Protection (“DEEP”)
"Project ISO"	State Program to Procure 150 MW of Class I Renewable Generation Resources
"REC"	Renewable Energy Certificate
"RGGI"	Regional Greenhouse Gas Initiative
"RPS"	Renewable Portfolio Standards
"RSP"	ISO-NE's Regional System Plan
"SWCT"	ISO-NE Southwest Connecticut Zone
"UI"	The United Illuminating Company
"WMECO"	Western Massachusetts Electric Company

Chapter 1: INTRODUCTION

1.1 Overview of CL&P's 2012 Forecast of Loads and Resources Report

The Connecticut Light & Power Company ("CL&P") is a company engaged in electric distribution and transmission services in Connecticut, as defined in Conn. Gen. Stat. §16-1. As such, CL&P has prepared this Ten-Year Forecast of Loads and Resources ("FLR") pursuant to Conn. Gen. Stat. §16-50r. CL&P has provided an annual FLR to the Connecticut Siting Council ("CSC") for over thirty years. This 2012 FLR includes the following information.

1. A tabulation of the peak loads, resources, and margins for each of the next ten years, using CL&P's 50/50 financial forecasting methodology.
2. Data on energy use and peak loads for the five preceding calendar years, including data on the energy savings provided by CL&P's Conservation and Load Management Programs ("C&LM") during that period.
3. A list and discussion of planned transmission lines on which proposed route reviews are being undertaken or for which certificate applications have already been filed.
4. For each generating facility that generated more than one megawatt from which CL&P purchased power, a statement of the name, location, size, type of the generating facility, fuel consumed by the facility, and the by-product of the consumption.

1.2 Energy and Peak Demand Forecasts

There is uncertainty in any forecast and it should be noted that weather can have a large impact on the realization of any forecast. CL&P's electric energy usage is expected to increase by a weather-normalized compound annual growth rate (CAGR) of 0.4% per year and peak demand is expected to grow by 0.7% per year over the 10-year forecast period from 2012 through 2021.

While CL&P is providing its forecast developed for financial forecasting purposes, CL&P uses ISO-NE's load forecast for transmission planning purposes. Further discussion of CL&P's forecast is provided in Chapter 2.

1.3 Evolving Load and Resource Influences

As part of the state's restructuring of the electric industry, which began in 1998, CL&P was ordered to sell its generation assets, while remaining a Connecticut electric distribution and transmission company. Since that time, the state has enacted a number of policies and programs which affect the developing wholesale electric market in the region.

State Mandated Integrated Resource Planning

In 2007, the Connecticut legislature passed PA 07-242*, An Act Concerning Electricity and Energy Efficiency ("PA 07-242")*, directed the annual development of an integrated resource plan ("IRP") for Connecticut. In 2011, the Connecticut legislature passed PA 11-80, *An Act Concerning the Establishment of the Department of Energy and Environmental Protection ("DEEP") and Planning for Connecticut's Energy Future ("PA 11-80".)* PA 11-80 calls for DEEP to create an Integrated Resource Plan for Connecticut ("IRP") by January 1, 2012 and biennially thereafter, in consultation with CEAB and the EDCs.

On January 17, 2012, DEEP issued its Draft 2012 IRP identifying two primary recommendations: 1) increase energy efficiency program spending and 2) increase flexibility to meet renewable energy targets.

ISO-NE Wholesale Electric Markets and State Procurement of Generation Resources

Section 2.3 of this report discusses the results of the most recent forward capacity auction in the ISO-NE wholesale electricity market. In the past, Connecticut has taken action to procure renewable, peaking and capacity resources through state run solicitations for these resources that result in contracts for electric product sales to the EDCs. The state oversees the procurement processes, including determination of what resources to procure and in what amounts. The EDCs then enter into and administer these contracts for these resources with the State's selected electric suppliers (see Section 2.2).

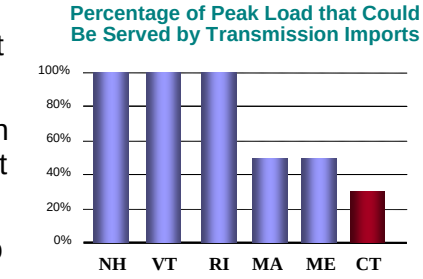
Conservation and Load Management Programs

For many years, CL&P has been developing and implementing nationally recognized Conservation and Load Management ("C&LM") programs for its customers to help them control their energy usage, save money and reduce overall electric consumption in the state. These successful programs are primarily funded by a 3 mil per kWh charge on customer bills, as well as revenues received from Regional Greenhouse Gas Initiative ("RGGI") auctions and the sale of Renewable Energy Credits ("REC"). Further discussion of CL&P's C&LM program forecast can be found in Chapter 3. The 2012 C&LM Plan includes a discussion of a ramp up of programs consistent with the Malloy Administration's goal to make Connecticut number one in the nation in energy efficiency.

Transmission Planning

CL&P plans, builds and operates transmission infrastructure with a long-term vision to safely and reliably deliver power to its customers, under a wide variety of supply and demand conditions. A detailed discussion of CL&P's transmission forecast can be found in Chapter 4.

- CL&P is responsible to meet reliability standards mandated by FERC and implemented by NERC, and faces severe financial penalties of up to $1 million per day for *each* non-compliance occurrence.
- Among all the New England states, Connecticut is the least able to serve its peak load using power imports.
- Connecticut imports are currently limited by its transmission system to a range of 300 MW to 2,500 MW – or up to about 30% of the state's peak load.
- Consequently, at least 70% of the electric power needed to serve customer peak demand must be generated in Connecticut.



Note: Chart uses approximate values based on known interface limits.

- Regional environmental requirements such as Renewable Portfolio Standards ("RPS") and Federal EPA may necessitate looking beyond New England for low-emissions and renewable resources.
- Potential Federal EPA legislation restricting the output of "greenhouse gasses" and or water and air quality may lead to a change in the generation mix in Connecticut. Uncertainty in Connecticut environmental mandates and the future effect on generator locations because of renewables integration and air/water quality constraints will play key roles on resource adequacy and reliability in the future.
- The potential to develop large quantities of renewable resources, like solar, wind and hydroelectric power, is very low in Connecticut, but wind and hydroelectric power have greater development probability in northern New England and Canada.

- The prospect of transporting renewable energy from northern New England and Canada to southern New England is particularly promising. Northeast Utilities, the parent company of CL&P, is currently developing a transmission project with NSTAR and Hydro-Quebec that would enable imports of up to 1,200 MW of low-carbon power generated in Canada.
- FERC Order 1000 on "Transmission Planning and Cost Allocation" was issued on July 21, 2011. The order provides for consideration of transmission needs driven by public policy requirements in the local and regional planning process including mandates that require utilities and RTOs to prepare and submit compliance filings. The state of Connecticut along with other stakeholders is helping ISO-NE to develop this compliance filing.

1.4 Chapter 1 Review

Despite the complicated mix of the recession, market pressures and market participants - much different from the landscape when the legislature originally required companies to provide an annual Forecast of Loads and Resources ("FLR") - Connecticut is expected to see a moderate rise in electric energy consumption and peak demand over the forecast period, but not a lack of generation resources. While CL&P's 2011 FLR indicates that there will be adequate generation resources for the forecast period, possible generation changes prompted by future environmental regulations will require a robust, flexible transmission system to reliably provide electric service to customers. In this report CL&P discusses its efforts to build and maintain a reliable transmission system for delivering renewable energy to its customers and the region.

Chapter 2: FORECAST OF LOADS AND RESOURCES

Chapter Highlights

- Although electric energy usage is expected to increase by 0.4% per year over the 10-year forecast period, peak demand is expected to grow by 0.7% per year during this time.
- While CL&P uses its own Reference Plan Forecast for financial forecasting, the Company uses ISO-NE's load forecast for transmission planning purposes.

2.1 Electric Energy and Peak Demand Forecast

The energy and peak demand forecasts contained in this chapter are based on the Company's budget forecast, which was prepared in October 2011, and are based on CL&P's total franchise area. The base case or 50/50 case is also referred to as the Reference Plan Forecast. The forecast excludes wholesale sales for resale and bulk power sales. CL&P's Reference Plan *Energy* Forecast is based on the results of econometric models, adjusted for CL&P's forecasted C&LM programs shown in Chapter 3 and the projected reductions resulting from distributed generation ("DG") projects developed in accordance with Public Act 05-01, *An Act Concerning Energy Independence* ("PA 05-01").

The Reference Plan *Peak Demand* Forecast is based on an econometric model that uses energy as a trend variable, thus, the reductions for C&LM and DG are implicitly included. The results of the econometric model are adjusted for projected reductions due to ISO-NE's load response program.

The Reference Plan Forecast is used for CL&P's financial planning, but it is not used for transmission planning. As ISO-NE is responsible for regional transmission planning and reliability, it independently develops its own forecast which CL&P utilizes to plan and construct its transmission system. Section 2.1.3 discusses ISO-NE's forecast in general terms and how it conceptually compares to CL&P's forecast.

The Reference Plan *Energy* Forecast projects a weather-normalized compound annual growth rate ("CAGR") for total electrical energy output requirements of 0.4% for CL&P from 2011-2021. Without the Company's C&LM programs and DG resources, the forecasted energy growth rate would be 1.3%.

The normalized CAGR for summer peak demand in the Reference Plan *Peak Demand* Forecast is forecasted to be 0.7% over the ten-year forecast period. Similarly, if CL&P's C&LM and DG programs, along with the ISO-NE load response programs, were excluded, the CAGR for forecasted peak demand would be 1.3%.

Table 2-1 provides historic output and summer peaks, actual and normalized for weather, for the 2007-2011 period, and forecast output and peaks for the 2012-2021 period. The sum of the class sales for each year, adjusted for company use and associated losses, is the annual forecast of system electrical energy requirements or output. This is the amount of energy which must be supplied by generating plants to serve the loads on the distribution system.

The Reference Plan Forecast is a 50/50 forecast[1] that assumes normal weather throughout the year, with normal peak-producing weather episodes in each season. The forecasted 24-hour

[1] A "50/50 forecast" is a forecast that is developed such that the probability that actual demand is higher than the forecasted amount is 50%, and the probability that actual demand is lower than the forecasted amount is also 50%.

mean daily temperature for the summer peak day is 82º Fahrenheit ("F") and is based on the average peak day temperatures from 1981-2010. The Reference Plan Forecast's summer peak day is assumed to occur in July, since this is the most common month of occurrence historically. It should be noted, however, that the summer peak has occurred in June, August and September in some years.

2.1.1 Uncertainty in the Reference Plan Forecast

There is uncertainty in any long-run forecast, because assumptions that are used in the forecast are selected at a point in time. The particular point of time chosen is generally insignificant, unless the forecast drivers are at a turning point. Outlined below are five major areas of uncertainty that are inherent to this forecast.

- The Economy - The Reference Plan Forecast is based on an economic forecast that was developed in August 2011. Business cycles represent normal economic fluctuations which are typically not reflected in long-run trend forecasts because recovery eventually follows recession, although it is difficult to pinpoint when. So while the level of energy or peak demand that is forecasted for any given year of the forecast may be attained a little earlier or later than projected, the underlying trend is still likely to occur at some point and needs to be planned for.
- DG Monetary Grant Program - This forecast includes modest assumptions about sales reductions resulting from DG projects for which monetary grants have been requested on or before October 14, 2008[2]. If customers who have already applied for monetary grants decide not to move forward with their projects, energy usage and peak demand would be different from the forecast.
- Electric Prices - This forecast assumes that total average electric prices will continue to decrease in 2012, then remain fairly stable and that there will be no new price shocks that would cause additional dramatic price-induced conservation similar to what occurred in the 2005 to 2007 period. Also, this forecast makes no adjustments to electric consumption for new pricing structures, such as dynamic peak pricing, which may be on the forecast horizon.
- Electric Vehicles ("EV") – This forecast includes explicit additions to electrical energy output requirements due to electric vehicles. It does not include any additions to the peak forecast since it assumed that the majority of the charging will be done off-peak.
- Weather – The Reference Plan Forecast assumes normal weather based on a thirty-year average (i.e., 1981 – 2010) of heating and cooling degree days. The historical peak day 24-hour mean temperatures range from 74º F to 88º F, with deviations from the average peak day temperatures being random, recurring and unpredictable occurrences. For example, the lowest peak day mean temperature occurred in 2000, while the highest occurred in 2001. This variability of peak-producing weather means that over the forecast period, there will be years when the actual peaks will be significantly above or below the forecasted peaks.

Despite the inherent risks outlined above, the Company believes its current forecast to be the best possible given the information and tools available today.

2.1.2 Forecast Scenarios

Table 2-1 contains scenarios demonstrating the variability of peak load around the 50/50 peak forecast due to weather. The table shows that weather has a significant impact on the peak

[2] On March 18, 2009, the DPUC issued a final decision in Docket No. 05-07-17RE02 which suspended the grant program indefinitely. Projects that had submitted an application prior to October 14, 2008 were still eligible for grants.

load forecast with variability of approximately 10%, or 700 MWs, above and below CL&P's 50/50 forecast, which is based on normal weather. To illustrate, the 2021 summer peak forecast reflecting average peak-producing weather is 5,663 MWs. However, either extremely mild or extremely hot weather could result in a range of potential peak loads from 4,940 MWs to 6,279 MWs. This 1,339 MWs of variation, which is a band of approximately plus or minus 10% around the average, demonstrates the potential impact of weather alone on forecasted summer peak demand.

Extremely hot weather is equally unpredictable, yet the impact is immediate. A hot day in the first year of the forecast that matches the extreme peak day weather in 2001 could produce peak demand almost as high as the forecast for the sixth year under normal weather assumptions. Even a moderately hot day, such as experienced on the 2005 peak day, could increase peak demand by approximately 125 MWs.

The Extreme Hot Weather scenario roughly corresponds conceptually to ISO-NE's 90/10 forecast, described in Section 2.1.3.

2.1.3 ISO-NE Demand Forecasts

The CSC's 2008 Review of the Ten-Year Forecast of Loads and Resources provides a concise description of the ISO-NE's "90/10" forecast used by CL&P for transmission planning purposes. A relevant excerpt is provided below.

> Called the "90/10" forecast, it is separate from the normal weather (50/50) forecasts offered by the Connecticut utilities. However, it is the one used by both ISO-NE and by the Connecticut utilities for utility infrastructure planning, including transmission and generation.
>
> A 90/10 forecast is a plausible worst-case hot weather scenario. It means there is only a 10 percent chance that the projected peak load would be exceeded in a given year, while the odds are 90 percent that it would not be exceeded in a given year. Put another way, the forecast would be exceeded, on average, only once every ten years. While this projection is extremely conservative, it is reasonable for facility planning because of the potentially severe disruptive consequences of inadequate facilities: brownouts, blackouts, damage to equipment, and other failures. State utility planners must be conservative in estimating risk because they cannot afford the alternative. Just as bank planners should ensure the health of the financial system by maintaining sufficient collateral to meet worst-case liquidity risks, so load forecasters must ensure the reliability of the electric system by maintaining adequate facilities to meet peak loads in worst-case weather conditions. While over-forecasting can have economic penalties due to excessive and/or unnecessary expenditures on infrastructure, the consequences of under-forecasting can be much more serious. Accordingly, the Council will base its analysis in this review on the ISO-NE 90/10 forecast. Page 6.

As CL&P has reported in the past, there is one other major difference between the CL&P and ISO-NE forecasts, aside from the difference between the 50/50 forecast methodology used by CL&P and the 90/10 forecast methodology used by ISO-NE. The CL&P demand forecasts include explicit reductions in the energy forecast for the Company's C&LM programs and DG resources and explicit reductions in the peak demand forecast for ISO-NE's Load Response program, while the ISO-NE demand forecasts do not include these reductions; instead, ISO-NE considers C&LM, Load Response and DG to be supply resources in their capacity forecast.

Table 2-2 shows CL&P's Reference Plan Forecast with savings from CL&P's C&LM programs, DG and ISO-NE's Load Response program added back in to make it easier to compare CL&P's forecast with ISO-NE's forecast.

Table 2-1: CL&P 2012 Reference Plan Forecast

	Net Electrical Energy Output Requirements		Reference Plan (50/50 Case)			Extreme Hot Scenario			Extreme Cool Scenario		
Year	Output	Annual Change	Peak	Annual Change	Load Factor	Peak	Annual Change	Load Factor	Peak	Annual Change	Load Factor
	GWh	(%)	MW	(%)	(2)	MW	(%)	(2)	MW	(%)	(2)
HISTORY											
2007	25185		5209		0.552						
2008	24485	-2.8%	5289	1.5%	0.527						
2009	23364	-4.6%	4873	-7.9%	0.547						
2010	23931	2.4%	5345	9.7%	0.511						
2011	23489	-1.8%	5516	3.2%	0.486						
Compound Rates of Growth (2007-2011)											
	-1.7%		1.4%								
HISTORY NORMALIZED FOR WEATHER *											
2007	24936		5209		0.546						
2008	24467	-1.9%	5184	-0.5%	0.537						
2009	23735	-3.0%	4935	-4.8%	0.549						
2010	23484	-1.1%	4994	1.2%	0.537						
2011	23281	-0.9%	5279	5.7%	0.503						
Compound Rates of Growth (2007-2011)											
	-1.7%		0.3%								
FORECAST											
2012	23434	0.7%	5028	-4.8%	0.531	5643	6.9%	0.473	4305	-18.4%	0.620
2013	23583	0.6%	5128	2.0%	0.525	5744	1.8%	0.469	4405	2.3%	0.611
2014	23802	0.9%	5230	2.0%	0.520	5846	1.8%	0.465	4508	2.3%	0.603
2015	23982	0.8%	5321	1.7%	0.515	5936	1.6%	0.461	4598	2.0%	0.595
2016	24203	0.9%	5399	1.5%	0.510	6014	1.3%	0.458	4676	1.7%	0.589
2017	24219	0.1%	5460	1.1%	0.506	6076	1.0%	0.455	4738	1.3%	0.584
2018	24278	0.2%	5517	1.0%	0.502	6133	0.9%	0.452	4795	1.2%	0.578
2019	24321	0.2%	5572	1.0%	0.498	6188	0.9%	0.449	4850	1.1%	0.573
2020	24371	0.2%	5617	0.8%	0.494	6232	0.7%	0.445	4894	0.9%	0.567
2021	24304	-0.3%	5663	0.8%	0.490	6279	0.7%	0.442	4940	0.9%	0.562
Compound Rates of Growth (2011-2021)											
	0.3%		0.3%			1.3%			-1.3%		
Normalized Compound Rates of Growth (2011-2021)											
	0.4%		0.7%			1.7%			-0.8%		

1. Sales plus losses and company use.
2. Load Factor = Output (MWh) / (8760 Hours X Season Peak (MW)).

Forecasted Reference Plan Peaks are based on normal peak day weather (82º mean daily temperature). Forecasted High Peaks are based on the weather that occurred on the 2001 peak day (88º mean daily temperature). Forecasted Low Peaks are based on the weather that occurred on the 2000 peak day (74º mean daily temperature).

Table 2-2: Adjustments to Output and Summer Peak Forecasts

Net Electrical Energy Output Requirements

Year	Unadjusted Output GWH	Distributed Generation GWH	Company Sponsored C&LM GWH	ISO-NE Load Response GWH	Adjusted Output GWH	Annual Change (%)
HISTORY NORMALIZED FOR WEATHER						
2011					23,281	
FORECAST						
2012	24,079	(581)	(64)	-	23,434	0.7%
2013	24,425	(590)	(252)	-	23,583	0.6%
2014	24,831	(597)	(432)	-	23,802	0.9%
2015	25,186	(597)	(607)	-	23,982	0.8%
2016	25,580	(598)	(779)	-	24,203	0.9%
2017	25,764	(597)	(948)	-	24,219	0.1%
2018	25,988	(597)	(1,113)	-	24,278	0.2%
2019	26,194	(597)	(1,275)	-	24,321	0.2%
2020	26,403	(597)	(1,435)	-	24,371	0.2%
2021	26,494	(597)	(1,593)	-	24,304	-0.3%
Normalized Compound Rates of Growth (2011-2021)						
	1.3%				0.4%	

Reference Plan (50/50 Case)

Year	Unadjusted Peak MW	Distributed Generation MW	Company Sponsored C&LM MW	ISO-NE Load Response MW	Adjusted Peak MW	Annual Change (%)
HISTORY NORMALIZED FOR WEATHER						
2011					5,279	
FORECAST						
2012	5,185	(50)	(7)	(100)	5,028	-4.8%
2013	5,310	(50)	(32)	(100)	5,128	2.0%
2014	5,437	(51)	(56)	(100)	5,230	2.0%
2015	5,551	(51)	(79)	(100)	5,321	1.7%
2016	5,652	(51)	(102)	(100)	5,399	1.5%
2017	5,737	(51)	(125)	(100)	5,460	1.1%
2018	5,816	(51)	(148)	(100)	5,517	1.0%
2019	5,893	(51)	(170)	(100)	5,572	1.0%
2020	5,960	(51)	(192)	(100)	5,617	0.8%
2021	6,028	(51)	(214)	(100)	5,663	0.8%
Normalized Compound Rates of Growth (2011-2021)						
	1.3%				0.7%	

Extreme Hot Weather Scenario

Year	Unadjusted Peak MW	Distributed Generation MW	Company Sponsored C&LM MW	ISO-NE Load Response MW	Adjusted Peak MW	Annual Change (%)
HISTORY NORMALIZED FOR WEATHER						
2011					5,279	
FORECAST						
2012	5,800	(50)	(7)	(100)	5,643	6.9%
2013	5,926	(50)	(32)	(100)	5,744	1.8%
2014	6,053	(51)	(56)	(100)	5,846	1.8%
2015	6,167	(51)	(79)	(100)	5,936	1.6%
2016	6,268	(51)	(102)	(100)	6,014	1.3%
2017	6,352	(51)	(125)	(100)	6,076	1.0%
2018	6,432	(51)	(148)	(100)	6,133	0.9%
2019	6,509	(51)	(170)	(100)	6,188	0.9%
2020	6,576	(51)	(192)	(100)	6,232	0.7%
2021	6,644	(51)	(214)	(100)	6,279	0.7%
Normalized Compound Rates of Growth (2011-2021)						
	2.3%				1.7%	

1. Sales plus losses and company use.
2. Load Factor = Output (MWH) / (8760 Hours X Season Peak (MW)).

2.2 Resources: Existing and Planned Generation Supply

General Connecticut Capacity Picture

Table 2-3 provides a current snapshot of Connecticut's supply-side capacity resources based on fuel type and age, per ISO-NE documents and the Connecticut 2012 IRP. Table 2-3 includes both existing supply side resources and those under contract to be built.

CL&P Specific Capacity Picture

CL&P does not own generation as a result of the restructuring of the electric industry in Connecticut that began in 1998.

Ongoing Generation Purchase Obligations

The Company purchases generation under a number of power-purchase agreements. CL&P also purchases generation from customers who choose to provide supply to the grid through the use of Rate 980. Rate 980 is a CL&P tariff that allows customer-owned generation to be sold to CL&P at prices derived from the ISO-NE wholesale energy market. CL&P does not use any of the foregoing purchases to serve load but rather uses them in the ISO-NE wholesale market to offset contract cost obligations.

Project 150

Over the last eight years, the EDCs have entered into long-term purchase power agreements with Class I renewable energy resource projects, in cooperation with the CCEF and under the direction of the DPUC. Conn. Gen. Stat. §16-244c directed that such agreements should be comprised of not less than a total of 150 MW, and the DPUC program to procure these renewable resources is commonly known as "Project 150". Both CL&P and UI are responsible for compensating Project 150 suppliers through a DPUC-approved Cost Sharing Agreement. CL&P incurs approximately 80% of the costs and receives approximately 80% of the benefits derived from Project 150 energy purchase agreements ("EPAs").

Table 2-4 lists the projects that are currently under long-term contracts in Project 150 and denotes their planned capacity and the estimated date the projects plan to begin operation.

Table 2-3:
Summer Seasonal Claimed Capabilities for Existing and Contracted Connecticut Capacity Sorted by Fuel Supply and Age

		Fuel Supply (first type is primary, second type is alternate)											
		Nuclear	Natural Gas	Natural Gas / Light Oil	Residual Oil	Residual Oil / Natural Gas	Coal / Residual Oil	Coal	Light Oil	Light oil / Natural Gas	Other	Water	Total
	Age												
	Under contract to be built		45							130	133		308
	<= 10 years old		139	1,299					123	375	1		1,937
	<= 20 years old		539						12	118	15	2	686
	<= 30 years old	1,225		87					14		163	13	1,502
	<= 40 yeas old	875			415	448						8	1,746
	<= 50 years old				574	236	383		306				1,499
	Greater than 50 years old				162	198						111	471
	Total	2,100	723	1,386	1,151	882	383	0	455	623	312	134	8,149
Sources / Notes													
(1)	Existing unit ratings from January 2012 ISO-NE seasonal claimed capability report at: http://www.iso-ne.com/genrtion_resrcs/snl_clmd_cap/2012/scc_january_2012.xls												
(2)	Under contract to be built unit ratings for Project 150 MWs from this section, rest from 2012 CT Integrated Resource Plan (IRP) prepared by the CT Department of energy and Environmental Protection												
(3)	Existing unit in-service dates from 2011 ISO-NE CELT report at: http://www.iso-ne.com/trans/celt/report/2011/2011_celt_report.xls												
(4)	Other fuel includes resources whose primary fuel is wind, tires, biomass, refuse, landfill gas or wood.												
(5)	Lake Road units 1 through 3, 745 summer MWs are physically but not electrically in Connecticut and so are not part of the table. The 2012 CT IRP indicates that post-NEEWS these resources would likely be considered electrically in Connecticut. These units are just less than ten years old, their primary fuel is natural gas and their alternative fuel is oil.												

Table 2-4: Renewable Generation Projects Selected In Project 150

Project (Location)	Project Amount (MW)	Contract Amount (MW)	Est. In-Service Year	Term
Round 2				
DFC-ERG Milford Project (Milford, CT)	9	9	2012	18
Plainfield Renewable Energy	37.5	30	2014	15
Clearview Renewable Energy, LLC	30	30	2012	20
Stamford Hospital Fuel Cell CHP (Stamford, CT	4.8	4.8	2013	15
Clearview East Canaan Energy, LLC (North Canaan, CT)	3	3	2012	20
Waterbury Hospital Fuel Cell CHP (Waterbury, CT)	2.8	2.8	2012	15
Round 3				
Cube Fuel Cell	3.36	3.36	2013	20
DFC-ERG Glastonbury	3.4	3.4	2012	20
DFC-ERG Trumbull	3.4	3.4	2013	20
DFC-ERG Bloomfield	3.65	3.65	2012	20
Bridgeport Fuel Cell Park	14.93	14.93	2012	15

Although the Project 150 generating facilities have contracts with the EDCs, and CL&P is responsible for 80% of their costs and benefits, they are not included in this report's supply tables since CL&P does not anticipate acting as Lead Market Participant for them in the ISO-NE wholesale markets. CL&P believes each project owner has an obligation under this proceeding's enabling statute to report on its project directly to the CSC. CL&P will revisit whether to include these resources in the supply tables in annual filings after they have been placed in-service and reporting responsibilities have been better defined.

Peaking Generation Contracts

PA 07-242 required the state's two publicly owned electric utilities, as well as other interested entities, to submit a proposal to the DPUC to build peaking generation facilities. CL&P is the contractual counter parties to the three selected projects and through a cost sharing agreement with UI is responsible for 80% of the costs. The three selected projects provide a total of 506 MW of peaking generation capacity. CL&P will not receive any of the projects' electricity products nor represent the projects in the ISO-NE markets, and so it is the responsibility of the owners of the winning projects to provide their services to the market. CL&P does not include

these projects in its annual filings. As of January 1, 2012 the four GenConn units at Devon are in-service, providing approximately 188 MW of summer rated capacity as are the four GenConn Middletown units (188 MW summer). The PSEG New Haven units (130 MW summer) are expected in-service June 2012.

Capacity Contracts

In the DPUC's Docket No. 05-07-14PH02 *DPUC Investigation of Measures to Reduce Federally Mandated Congestion Charges (Long Term Measures)* the DPUC selected a portfolio of four projects to provide capacity and reduce FMCCs. The winning portfolio constituted a total maximum capacity of 787 MW and consisted of one 620 MW new combined cycle gas-fired baseload plant in Middletown offered by Kleen Energy, a 66 MW peaking plant located in the constrained Southwest Connecticut region (Stamford) offered by Waterside Power, one 96 MW new peaking unit also located in Southwest Connecticut (Waterbury) offered by Waterbury Generation LLC, and one state-wide 5 MW energy efficiency program offered by Ameresco.

UI is the counterparty to both the Waterbury Generation and Ameresco contracts, while CL&P is the counterparty to the Waterside Power and Kleen Energy contracts. CL&P is responsible for 80% of all the costs for all four projects and UI the remaining 20%. These projects are currently in-service.

2.2.1 Capacity Forecast

The capacity tables in this chapter provide estimates of CL&P's supply resources for which it has ownership or purchase entitlement interests at present and will maintain such interests during the 2012-2021 forecast period. All resources have winter and summer ratings in MWs as reported in ISO-NE's January 2012 seasonal claimed capability report, reflecting the effects of varying seasonal conditions, such as ambient air and water temperatures, on unit ratings. In 2010, the seasonal claimed capability ratings methodology was reformed for resources designated as intermittent power resources ("IPR")to use the same method as used to establish these resources' qualified capacity in the ISO-NE's Forward Capacity Market ("FCM"). The ratings in the tables reflect this reformation for those resources designated as IPR. As noted in prior forecasts, as of June 2010 capacity obligations will be measured and met using principally only summer-rated capacity. Winter-rated capacity can be compensated in the FCM in two ways: 1) resources with winter ratings greater than their summer ratings may partner with resources having summer ratings greater than their winter ratings to meet capacity obligations; or 2) IPRs are paid for their winter rated capacity. Resources contractually obligated to sell all their output to utilities under PURPA are considered IPRs. In order to provide the CSC with a complete picture of Connecticut's generation capacity, winter ratings will continue to be provided in this annual report.

2.2.2 Existing Resources and Planned Generation Resource Additions, Deactivations or Retirements

Table 2-5 lists existing supply resources in which CL&P has ownership or entitlement interests for winter 2011/2012 and summer 2012. This table lists CL&P's supply resources based on ownership or entitlement, arranged by: Base Load, Intermediate, Peaking, Pumped Storage, Hydroelectric, and Purchases categories.

Table 2-5:
Generation Facilities in Which CL&P Has Ownership or Entitlement by Category

	WINTER RATING (MW)	SUMMER RATING (MW)	YEAR INSTALLED	LOCATION	% ENTITLEMENT CL&P
	2011/12	2012			
Base					
Vermont Yankee	49.59	0.00	1972	Vernon, VT	7.897
Nuclear Subtotal	49.59	0.00			
Intermediate	0.00	0.00			
Peaking	0.00	0.00			
Pumped Storage	0.00	0.00			
Hydro	0.00	0.00			
Purchases					
System	0.00	0.00			
Non-Utility	106.09	56.20			
Purchase Total	106.09	56.20			
Total Generation	155.68	56.20			

Base-load units are typically operated around the clock, intermediate units are those used to supply additional load required over a substantial part of the day, and peaking units supply power usually during the hours of highest demand. On occasion, some of the more efficient intermediate units operate as base-load units, while others may be called upon to operate as peaking capacity. Accordingly, these categories are intended to be generally descriptive rather than definitive, and reflect past operating patterns.

2.2.3 Ten-Year Capacity Forecast

Tables 2-6 and 2-7 summarize the ten-year capacity forecast for supply resources in which CL&P will have ownership or entitlement interest during the summer and winter peak periods from 2012 through 2021. The tables show CL&P's reserve margin expressed in MWs. Reserve margins decline over time, reflecting the ends of purchase power agreements. CL&P does not know with certainty that these resources will continue to operate as merchant generators once their contracts with CL&P end. However, with respect to these resources, the 2012 IRP assumes they will continue to operate.

Table 2-6:
2012 – 2021 Summer Forecast of Capacity (WM) at the Time of Summer Peak

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
SUPPLY BEFORE SALES OR EXCHANGES	56.20	56.20	56.20	44.31	41.31	23.95	23.95	15.12	15.12	0.55
CAPACITY SALES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET GENERATION AVAILABLE	56.20	56.20	56.20	44.31	41.31	23.95	23.95	15.12	15.12	0.55
RESERVE	56.20	56.20	56.20	44.31	41.31	23.95	23.95	15.12	15.12	0.55

Table 2-7:
2011/2012 – 2020/2021 Summer Forecast of Capacity (WM) at the Time of Winter Peak

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
SUPPLY BEFORE SALES OR EXCHANGES	155.68	57.25	57.25	44.56	44.56	41.56	23.96	22.26	15.21	14.37
CAPACITY SALES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET GENERATION AVAILABLE	155.68	57.25	57.25	44.56	44.56	41.56	23.96	22.26	15.21	14.37
RESERVE	155.68	57.25	57.25	44.56	44.56	41.56	23.96	22.26	15.21	14.37

Resource Purchases

Table 2-8 provides a listing of existing cogeneration and small power production facilities 1 MW and greater located in Connecticut from which CL&P purchased power in 20011. The winter and summer claimed capacity of the generation at each production facility as of January 2012 is shown in this table. As a result of reforming the methodology used to rate IPR some units have had their claimed capabilities fall below 1MW. They are still shown because their contract capacities continue to be greater than 1 MW and were reported in the past.

Table 2-8:
Existing Owned Customer Facilities 1 MW and Above
Providing Generation to the Northeast Utilities System

EXISTING & PROVIDED GENERATION TO CL&P DURING 2011

Project Name	Location	(1) Facility Type	Fuel Source	By-Product of Fuel Consumption	Estimated Capacity kW	Max Claimed Capability Winter	Max Claimed Capability Summer
FACILITIES UNDER LONG TERM CONTRACT (2)							
AES Thames	Montville, CT	COGEN	Coal	Steam	181,000	0	0
Derby Dam	Shelton, CT	SPP	Hydro	-	6,900	7,050	7,050
Goodwin Dam	Hartland, CT	SPP	Hydro	-	3,294	3,000	3,000
Colebrook	Colebrook, CT	SPP	Hydro	-	3,000	432	860
Quinebaug	Danielson, CT	SPP	Hydro	-	2,161	839	873
Kinneytown B	Seymour, CT	SPP	Hydro	-	1,500	513	330
Mid-CT CRRA(So. Meadow 5/6)	Hartford, CT	SPP	Refuse	-	67,000	48,843	49,419
Preston (SCRRRA)	Preston, CT	SPP	Refuse	-	13,850	16,651	16,169
Bristol RRF	Bristol, CT	SPP	Refuse	-	13,200	12,693	11,892
Lisbon	Lisbon, CT	SPP	Refuse	-	13,500	13,649	13,700
Hartford Landfill	Hartford, CT	SPP	Methane	-	2,445	1,705	1,777
					307,850	**105,375**	**105,070**
FACILITIES NOT UNDER LONG TERM CONTRACT (3)							
Pratt & Whitney	E. Hartford, CT	COGEN	Gas	Steam	23,800	N/A	N/A
Rainbow (Farmington River Power)	Windsor, CT	SPP	Hydro	-	8,200	N/A	N/A
Ten Co./The Energy Network	Hartford,CT	COGEN	Gas	Steam	4,500	N/A	N/A
WM Renewable	New Milford,CT	SPP	Methane	-	1,675	N/A	N/A
					38,175	**0**	**0**
				TOTAL EXISTING	**346,025**	**105,375**	**105,070**

(1) "SPP" Denotes a Small Power Producer, "COGEN" Denotes a Cogenerator.
(2) Estimated Capacity Represents Contracted Capacity.
(3) Estimated Capacity Represents Estimated Installed Capacity.

2.3 Generation Capacity Considerations

Although CL&P no longer owns or operates generation, it continues to have a responsibility to ensure the reliability of the electric system to deliver power to customers. Two important developments since the advent of the deregulated electric industry in Connecticut, the IRP and the ISO-NE FCM, play roles in planning for supply resources in the state.

Integrated Resource Plan for Connecticut

The 2012 IRP concluded that Connecticut will not need to add new capacity to supply capacity needs under a wide range of futures for the next ten years. This conclusion was based on a set of assumptions, including: retirements; the continued funding of C&LM initiatives at current levels; new resources contracted by the Connecticut come on-line as planned, including 506 MWs of peaking generation (see Section 2.2); and the completion of the NEEWS transmission projects. The 2012 IRP developed a Base Case, predicated on a number of assumptions that found that 3,326 MW of capacity may retire in New England by 2022, 1,121 MW in Connecticut. The foregoing retirements were based on a retirement study done as part of the 2012 IRP effort that compared future wholesale market revenues including net energy and capacity revenues to going-forward costs including costs to comply with possible future emission requirements

developed by the CT DEEP in consultation with other New England state environmental regulators and Connecticut generation owners

ISO-NE Forward Capacity Market

ISO-NE conducted its fifth Forward Capacity Auction ("FCA") in June 2011in which 39,360 MW of qualified capacity competed to provide 33,200 MWs needed for reliability between June 2014 and May 2015. The FCA consisted of seven rounds, starting at a price of $10.698/kW-mo. Bidding in the final round reached the minimum price established for this auction at $3.209/kW-mo, with 3,718MW of excess internal New England generation resources remaining. Note that the excess generation does not include 122 MW of real-time emergency generation that cleared surplus to the 600 MW allotment for real-time emergency generation under the capacity market rules.

Chapter 3: CONSERVATION AND LOAD MANAGEMENT (C&LM)

Chapter Highlights

- Energy and Demand savings resulting from Connecticut Energy Efficiency Fund programs are a cost-effective resource available to Connecticut customers.
- Connecticut Energy Efficiency Fund programs maximize the amount of energy-efficiency monies available to customers by leveraging a variety of funding sources.
- Connecticut Energy Efficiency Fund programs are recognized nationally and provide Economic development benefits to the State.
- The CL&P 2012 Conservation and Load Management Plan includes an increased savings scenario, which is consistent with Public Act 11-80 policy objectives of increasing the role of energy efficiency in Connecticut.

CL&P 2012 Conservation Plan

On September 30, 2011, the 2012 Conservation & Load Management Plan (2012 C&LM Plan) was filed with the Connecticut Department of Energy and Environmental Protection (DEEP). The 2012 C&LM Plan was a joint electric and natural gas program plan filed by the state's electric distribution companies, CL&P and The United Illuminating Company ("UI"), and natural gas distribution companies, Connecticut Natural Gas Corporation, Southern Connecticut Gas Company, and Yankee Gas Services Company, in Docket 11-10-03, *PURA Review of the Connecticut Energy Efficiency Fund's Conservation and Load Management Plan for 2012.* The 2012 C&LM Plan is based upon input from members of the public, industry groups and private enterprise, and was given final approval from the Energy Efficiency Board ("EEB") in September, 2011. A base budget and an increased savings scenario budget were presented in the 2012 C&LM Plan. In the 2012 C&LM Plan, CL&P proposed a base plan budget of $84.2 million and an increased savings scenario budget of $171.4 million.

Funding for C&LM programs currently comes from several sources. Since the passage of the state's restructuring legislation in 1999, a 3 mil electric charge has served as the primary funding source.[3] This funding source is known as the Connecticut Energy Efficiency Fund, which is administered by the state's electric and natural gas utility companies. In 2012, C&LM programs will receive additional funding from sources including the Independent System Operator of New England (ISO-NE)'s Forward Capacity Market, Class III renewable energy revenues, and Regional Greenhouse Gas Initiative (RGGI). In 2012, Demand Response will be fully funded by the ISO-NE Forward Capacity Market.

Energy efficiency is the most cost-effective resource available to policymakers to address rising energy costs, reliability challenges, and greenhouse gas reduction. Efficiency and load response programs reduce the amount of energy Connecticut's homes, businesses and schools consume, helping to decrease demand for energy from power plants, reducing the harmful emissions those power plants produce, and reducing consumer energy bills in all sectors: residential, commercial, industrial and municipal.

[3] Conn. Gen. Stat. § 16-245m.

Energy efficiency programs also provide economic development benefits for Connecticut. A 2009 independent study[4] analyzed the size of Connecticut's green jobs marketplace and showed that 2,675 jobs are directly attributed to energy efficiency. These jobs create $137 million of employment income, at an average salary of approximately $50,000 per year across all industry segments (residential, small business, commercial and industrial). An even greater number of indirect jobs has been created from the energy savings the programs deliver, as consumers and businesses spend and invest the money, which would otherwise have spent on energy, in other areas. Another 4,280 indirect and induced jobs can be attributed to energy efficiency activity in Connecticut.

Connecticut is a nationally recognized leader in implementing high-quality energy-efficiency programs. Since 2000, the American Council for an Energy Efficient Economy (ACEEE) has ranked Connecticut as one of the top states for energy efficiency. In the ACEEE's *2011 State Energy Efficiency Scorecard*, Connecticut ranked tied for eighth in the nation. This ranking reflects the success of Connecticut's energy efficiency programs.[5] However, a stated goal of the Malloy administration is to make Connecticut the leading state in energy efficiency. In response to this goal, CL&P included the increased savings scenario in the 2012 CL&M Plan. The increased funding scenario is based on an annual energy conservation savings goal of two percent of retail sales.

CL&P and Yankee Gas, with guidance from the EEB, maintain their conservation and load management programs' success through an evolving, integrated approach that reaches out to customers in their homes, at their jobs, in schools and in the community. Through seminars, workshops, teacher training, museum partnerships, trade and professional affiliations, retail partnerships and marketing, we are helping to shape a more energy-efficient consumer that not only participates in our award-winning programs, but makes wiser energy choices every day.

Connecticut Integrated Resource Plan

In 2007, Public Act 07-242, *An Act Concerning Electricity and Energy Efficiency*, mandated the creation of an Integrated Resource Plan (IRP) and that "resource needs shall first be met through all available energy efficiency and demand reduction resources that are cost-effective, reliable and feasible." The Act positioned energy efficiency as a key component of the state's comprehensive energy resource plan and creates the potential for more funding for energy efficiency programs in the future. In response to Public Act 07-242, CL&P and UI submitted an Integrated Resource Plan to the Connecticut Energy Advisory Board (CEAB) in 2008, 2009 and 2010.

In 2011, Public Act 11-80, *An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future Efficiency*, was passed which laid the groundwork for future Integrated Resource Plans. As a result, a fourth Integrated Resource Plan has been developed by DEEP with the Draft completed on January 17, 2012. The IRP recommends higher levels of energy efficiency spending consistent with the increased savings scenario in the 2012 C&LM Plan. The IRP estimates that the expanded energy efficiency programs and associated customer savings would support an additional 5,500 jobs by 2022.

[4] Navigant Consulting, CT Renewable Energy/Energy Efficiency Economy Baseline Study. Phase I Deliverable, March 27, 2009.

[5] Utility and Public Benefits Programs and Policies represent the largest share (40%) of the ACEEE ranking. Other categories in the ACEEE ranking were Transportation (18%), Building Energy Codes (14%), Combined Heat and Power (10%), State Government Initiatives (14%), and Appliance Efficiency Standards (4%).

3.1 Ten-Year C&LM Forecast

Table 3-1A presents the potential cumulative annual energy savings and summer and winter peak-load reductions forecasted for C&LM programs implemented in the CL&P service territory for the 2012 C&LM Plan base budget. Table 3-1B presents the potential cumulative annual energy savings and summer and winter peak-load reductions forecasted for CL&M programs implemented in the C&LP service territory for the 2012 C&LM increased savings scenario. Forecast years starting in 2013 are based on similar programs and budgets as the 2012. The projected impacts of C&LM programs have been shown as separate line items since the average impact of energy-efficiency programs is greater than ten years, while load-response activities have a more immediate, short-term impact.

3.2 Forecast Sensitivity

The C&LM programs utilize a complementary mix of lost opportunity, retrofit, and market transformation implementation strategies to achieve savings. The energy savings and peak-load reductions projected in this forecast are sensitive to changes in a number of factors including changes in the electricity marketplace and consumer attitudes.

The most significant variable in determining energy savings is the stability of funding. Projections are based on the continued implementation of a suite of programs similar in nature and focus to the 2012 C&LM Plan[6] and expected future funding as described above. Any additional legislative or regulatory changes in geographic and program focus will produce results that may vary from these projections. In particular, adoption of the Integrated Resource Plan and the Increased Savings scenario described above will have an impact on this forecast.

[6] A variety of funding sources are leveraged in order to support this level of C&LM activity. Since the passage of the State's restructuring legislation in 1999 (Public Act 98-28), a 3 mil electric charge has been the primary funding source for C&LM programs. The 3 mil charge will account for approximately $67.4 million of the C&LM budget in 2012. In addition to the 3 mil charge, demand savings from the C&LM Programs are entered into the Forward Capacity Market (FCM). CL&P expects approximately $10.0 million in revenues from the FCM (includes passive and active resources). Energy savings from C&LM activity also generates Class III renewable energy revenues that will support C&LM activity at a level of approximately $3.6 million in 2012. In addition to those sources of C&LM funding, CL&P estimates an additional $2.4 million annually of C&LM revenue from the Regional Greenhouse Gas Initiative (RGGI) as well as $0.8 in carrying charges in 2012.

Table 3-1A: CL&P C&LM Programs Impacts
Base Budget

Connecticut Light and Power 2012 – 2021 GWh Sales Saved

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential	27	106	179	248	313	375	433	489	543	595
Commercial	30	118	205	291	377	464	550	636	722	808
Industrial	7	28	48	68	88	109	129	149	169	190
Total GWh Sales Conserved	64	252	432	607	779	947	1,112	1,274	1,434	1,592

MW Reductions (Passive Resource Summer Impacts)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential	2	9	16	22	28	34	39	45	50	55
Commercial	4	18	32	46	60	74	88	101	115	129
Industrial	1	4	8	11	14	17	21	24	27	30
Total	**7**	**32**	**56**	**79**	**102**	**125**	**148**	**170**	**192**	**214**

MW Reductions (Passive Resource Winter Impacts)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential	6	28	47	66	84	102	118	135	150	165
Commercial	3	12	21	31	40	49	58	67	76	86
Industrial	1	3	5	7	9	11	14	16	18	20
Total	**10**	**43**	**74**	**104**	**133**	**162**	**190**	**218**	**245**	**271**

Note: This table includes only passive resources. It does not include 100 MW of Load Response demand savings (active resources) which CL&P maintains through the ISO-NE program.

Table 3-1B: CL&P C&LM Program Impacts
Increased Savings Scenario

Connecticut Light and Power 2012 – 2021 GWh Sales Saved

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential	55	240	425	609	794	978	1,163	1,348	1,532	1,717
Commercial	72	310	549	787	1,026	1,265	1,503	1,742	1,980	2,219
Industrial	17	73	129	185	241	297	353	409	465	520
Total GWh Sales Conserved	**144**	**623**	**1,102**	**1,581**	**2,060**	**2,540**	**3,019**	**3,498**	**3,977**	**4,456**

MW Reductions (Passive Resource Summer Impacts)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential	5	21	37	53	69	85	101	117	133	149
Commercial	11	47	83	119	155	191	227	263	299	335
Industrial	3	11	19	28	36	45	53	62	70	79
Total	**18**	**79**	**139**	**200**	**260**	**321**	**381**	**442**	**502**	**563**

MW Reductions (Passive Resource Winter Impacts)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Residential	13	55	97	140	182	224	267	309	351	394
Commercial	7	30	53	76	99	121	144	167	190	213
Industrial	2	7	12	18	23	28	34	39	45	50
Total	**21**	**92**	**162**	**233**	**304**	**374**	**445**	**515**	**586**	**657**

Note: This table includes only passive resources. It does not include 110 MW of Load Response demand savings (active resources) which CL&P maintains through the ISO-NE program.

Chapter 4: TRANSMISSION PLANNING AND SYSTEM NEEDS

Chapter Highlights

- CL&P's transmission facilities are part of the New England regional grid and must be designed, operated and maintained to ensure compliance with mandatory NERC reliability standards.
- CL&P is proposing new 345-kV and 115-kV transmission projects to strengthen the Connecticut transmission system.
- The New England transmission system is an important enabler of competitive markets and the region's efforts to meet environmental objectives and mandates.
- The Connecticut 2012 Integrated Resource Plan recognizes that a robust transmission system benefits both generation and load with increased interconnection and deliverability enhancements.
- FERC Order 1000 on "Transmission Planning and Cost Allocation" was issued on July 21, 2011. The order provides for consideration of transmission needs driven by public policy requirements in the local and regional planning process and also includes mandates that require utilities and RTOs to prepare and submit compliance filings. The State, along with other stakeholders, is helping ISO-NE to develop this compliance filing.

4.1 Transmission is planned and built for the long term

Transmission systems enable varying amounts and sources of generation to serve varying load over a long term. The addition of significant amounts of remote renewable generating capacity or the retirement of local generation may increase the need to import or export power to or from Connecticut, and the transmission system may need to be expanded. Transmission system additions are proposed and built to accommodate the future, considering as many scenarios as possible.

4.2 Transmission Planning and National Reliability Standards

The Federal Energy Policy Act of 2005 required FERC to designate an entity to provide for a system of mandatory, enforceable reliability standards under FERC's oversight. This action is part of a transition from a voluntary to a mandatory system of reliability standards for the bulk-power system. In July 2006, FERC designated the North American Electric Reliability Corporation ("NERC") as the nation's Electric Reliability Organization ("ERO"). The ERO is to improve the reliability of the bulk-power system by proactively preventing situations that can lead to blackouts, such as that which occurred in August 2003.

The Connecticut transmission system is part of the larger NERC Eastern Interconnection and thus subject to the interdependencies of generation, load and transmission in neighboring electric systems. NERC recognizes that the actual planning and construction of new transmission facilities have become more complex. In 1997, NERC stated the following:

> *The new competitive electricity environment is fostering an increased demand for transmission service. With this focus on transmission and its ability to support competitive electric power transfers, all users of the interconnected transmission*

systems must understand the electrical limitations of the transmission systems and the capability of these systems to reliably support a wide variety of transfers.

The future challenge will be to plan and operate transmission systems that provide the requested electric power transfers while maintaining overall system reliability. All electric utilities, transmission providers, electricity suppliers, purchasers, marketers, brokers, and society at large benefit from having reliable interconnected bulk electric systems. To ensure that these benefits continue, all industry participants must recognize the importance of planning these systems in a manner that promotes reliability.[7]

On March 15, 2007, The Federal Energy Regulatory Commission ("FERC") approved mandatory reliability standards developed by NERC. FERC believes these standards will form the basis to maintain and improve the reliability of the North American bulk power system. These mandatory reliability standards apply to users, owners and operators of the bulk power system, as designated by NERC through its compliance registry procedures. Both monetary and non-monetary penalties may be imposed for violations of the standards. The final rule, "Mandatory Reliability Standards for the Bulk Power System," became effective on June 18, 2007.

FERC Order 890 is amending the regulations and the pro forma open access transmission tariff adopted in Order 888 and 889 to ensure that transmission services are provided on a basis that is just, reasonable and not unduly discriminatory or preferential. The final rule is designed to: (1) strengthen the pro forma open-access transmission tariff, or OATT to ensure that it achieves its original purpose of remedying undue discrimination: (2) provide greater specificity to reduce opportunities for undue discrimination and facilitate the Commission's enforcement; and (3) increase transparency in the rules applicable to planning and use of the transmission system.

4.3 Environmental Regulations and Public Policy

A number of existing and proposed EPA rules and regulations will affect generation retirement decisions. While prices in the capacity markets will also drive these retirement decisions, EPA rules and regulations (e.g. regarding hazardous air pollutants such as mercury, tighter ozone standards and the Clean Water Act on cooling water intakes) that require generators to install costly retrofits will also be a major factor in retirement decisions in the longer term. For now, however, these regulations appear to have flexible retrofit requirements or lead times in order to minimize impacts on supply reliability.

With regards to public policy, Connecticut has the highest target under the renewable portfolio standard (RPS), 20% by 2020 of all New England states, but few native resources. CT meets its RPS targets primarily by purchasing renewable energy credits generated elsewhere in New England; therefore Connecticut competes with other states in the renewable energy credit market. The IRP 2012 found that Connecticut will fall short of its RPS target as early as 2018 unless the development of renewable resources and associated enabling transmission across New England is accelerated.

4.4 CT Integrated Resource Plan – IRP 2012

Connecticut passed Public Act 11-80, an Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future

[7] Planning Standards, North American Electric Reliability Council, September 1997

Efficiency, in 2011. The bill merged the Department of Environmental Protection and Department of Public Utility Control into a new state department - Department of Energy and Environmental Protection ("DEEP"). The bill was also designed to move the state closer to an efficient, affordable and clean energy future.

DEEP issued the state's 2012 final draft report of the IRP in January 2012. This report is the fourth IRP report for Connecticut and marks the first IRP report developed by DEEP. The report reviewed the state's 10-year electricity outlook and developed a comprehensive vision for improving the state's energy future. The report also recommends policies that will help make electricity cheaper, cleaner and more reliable, while supporting in-state employment.

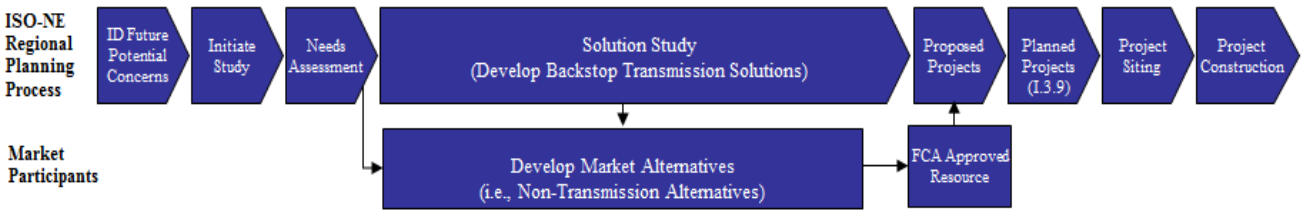
4.4.1 Transmission Planning Process

Within the ISO-NE regional planning process that supports compliance with NERC and NPCC planning standards, ISO-NE and transmission owners (TOs) perform reliability assessment studies of the New England transmission system. Individual sub-area studies ("Needs Assessments") are performed to identify system needs over a ten-year horizon. When a system reliability problem is identified from a needs assessment, ISO-NE and the TOs develop one or more transmission system options (i.e., backstop transmission solutions) to resolve the transmission reliability needs and ensure that NERC and NPCC reliability standards are met.

The transmission system solution options are then further evaluated to determine their feasibility of construction, environmental impacts, costs, longevity, operational differences, etc. When analysis of the options is complete, the TOs recommend a proposed transmission project to ISO-NE and the Planning Advisory Committee (PAC). In parallel, market participants can develop and propose market resource alternatives (non-transmission alternatives NTAs) that would resolve the identified needs.

These transmission studies, and the transmission solutions, are documented in a Solution study, and in aggregate provide a basis for updating ISO-NE's Regional System Plan (RSP), as depicted in the sequence of the process below:

Transmission Planning Process Figure



Two transmission reliability sub-area studies are currently in progress for Connecticut. These studies, performed by TO's in collaboration with ISO-NE, are at various stages in the ISO-NE Regional Planning Process.

1. Southwest Connecticut (SWCT) Solution Study.

2. Greater Hartford/Central Connecticut (GHCC) Needs Assessment. This study includes a needs assessment of the Greater Hartford area (including Northwest Connecticut,

Manchester, and Middletown areas) and a reassessment of the Central Connecticut Reliability Project (CCRP) portion of the New England East-West Solution (NEEWS).

4.4.2 Non-Transmission Alternatives to Resolve System Reliability Problems

In the IRP 2012 report the state of CT reiterated its position to build upon previous IRP decisions to remain active in the creation of a region-wide NTA process. Several states, including Connecticut, approached ISO-NE about the timing of NTA analysis and the need to better align markets and planning. The alignment of NTA processes with ISO-NE regional processes is important and has been recognized in prior Connecticut IRPs. Therefore, the IRP 2012 report did not propose a Connecticut-specific NTA process rather; Connecticut plans to support the development of the recently announced conceptual ISO-NE NTA process. This process is part of ISO-NE's Strategic Planning Initiative.

4.4.3 IRP 2012 Findings and Results

Transmission projects proposed for Southern New England (i.e. NEEWS) are an integral part of the CT IRP results upon which the report built its findings and recommendations. In addition to NEEWS being planned for transmission reliability purposes, the IRP 2012 concluded that NEEWS will also support locational resource adequacy in Connecticut by increasing the Connecticut import capability.

Furthermore, the NEEWS projects also allow an orderly implementation of public policy and market rules by:

1. Allowing implementation of environmental regulation that could cause early retirements of some CT resources or re-powering of some Connecticut generation resources.

2. Facilitating potential out-of-state regional renewable energy (Northern wind and possibly other renewables) to meet RPS requirements.

3. Providing an opportunity to deliver reduced electricity prices to CT consumers through the mitigation of possible energy and capacity price separation from the rest of New England.

ISO-NE's current development of a process to better align Markets and Planning is a new opportunity for the State of CT to participate in shaping the Regional Planning Process.

4.5 Background on CL&P's Transmission System

Transmission lines operate at 69-kV and above and collectively form the infrastructure that is the interstate electric "highway system." The transmission line system is capable of moving large amounts of electric power from where it is produced to where it is used. In New England, moving large amounts of electric power over longer distances is achieved primarily by the interconnected 345-kV regional bulk power system. The 345-kV transmission network and ties to neighboring utilities and control area are key for reliably meeting customer peak demands for electricity. CL&P's transmission network also includes lower capacity transmission ties to neighboring utilities, operating at voltages between 69 kV to 138 kV. These tie lines connect with WMECO in Massachusetts, National Grid in Rhode Island, Central Hudson in New York, Long Island Power Authority in New York, Connecticut Municipal Electric Energy Cooperative, Inc. ("CMEEC"), and UI.

Interstate tie lines make CL&P's transmission system part of the interconnected New England transmission network. Transmission lines across New England and outside of the region are

interconnected to form a transmission network, sometimes called a “grid” or “system”. A transmission grid serves multiple purposes, all of which work together to enhance delivery reliability. CL&P and other utilities design the transmission grid to withstand national, regional and company-specified contingencies, so that electric power can be transmitted reliably and safely throughout the interconnected grid. CL&P’s portion of the New England transmission grid is used to support reliable, economical and continuous service to intra-state customers. The interstate grid enables CL&P to efficiently transmit power throughout its franchise service territory and to share in the reliability benefits of parallel transmission paths.

CL&P’s 345-kV transmission system specifically enables the efficient movement of power from large central generating stations, such as Middletown 4, Kleen Energy, Lake Road and the Millstone Nuclear Power Station to the east and the Milford Power, Bridgeport Energy and other large units in Southwest and throughout Connecticut and over three interstate transmission tie lines to and from neighboring utilities.

The CL&P transmission system, with its tie lines to neighboring utilities, provides multiple paths for electric energy to move freely over the southern New England transmission grid following transmission and generation emergencies. CL&P especially relies on the bulk power 345-kV transmission grid to reliably transmit electric power to high load density areas in Connecticut and CL&P plans to maintain a robust and reliable 345-kV transmission network to meet those demands. CL&P’s long-term mission is to ultimately operate 345-kV loops to its neighboring electric systems in New England and New York to ensure reliability of its transmission system in the best interests of CL&P’s customers.

In the recent past, Connecticut’s most pressing transmission system need was to increase the capability of the system to transport power in southwestern Connecticut (“SWCT”), where nearly half of the state’s load is located. CL&P addressed these needs with the construction of the Bethel-Norwalk Project, Glenbrook Cables Project, the Long Island Cable Replacement Project and the Middletown Norwalk Project.

Existing Substations and System Loops

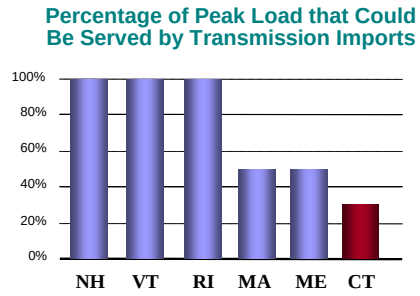
CL&P currently has twelve major bulk-power substations where the 345-kV and 115-kV transmission networks interconnect - Montville, Card, Manchester, Barbour Hill, Southington, Frost Bridge, North Bloomfield, East Devon, Norwalk, Killingly, Haddam, and Plumtree. These twelve substations enable bulk power from large central generation stations to join with power imported over the three 345-kV transmission tie lines for delivery to CL&P’s 115-kV system.

The 115-kV transmission system draws power from these bulk-power substation sources and transmits this power, together with power from smaller central generating stations connected to the 115-kV system and from 115-kV transmission tie lines, to distribution step-down substations which then supply local area load over power distribution lines. The 115-kV transmission system loops around high load-density pockets, primarily in central and SWCT, and connects power sources with load centers in the eastern and northwestern areas of the state.

Connecticut's Transmission System and Serving Load

CL&P plans, builds and operates transmission infrastructure with a long-term vision to safely and reliably deliver power to its customers, under a wide variety of supply and demand conditions.

- CL&P is responsible to meet mandatory reliability standards mandated by the FERC and implemented by NERC and faces severe financial penalties of up to $1 million per day for *each* non-compliance occurrence.
- Among all the New England states, Connecticut is the least able to serve its peak load using power imports.
- Connecticut imports are currently limited by its transmission system to a range of 300 MW to 2,500 MW – or up to about 30% of the state's peak load.
- Consequently, at least 70% of the electricity needed to serve customer peak demand must be generated in Connecticut.



Note: Chart uses approximate values based on known interface limits.

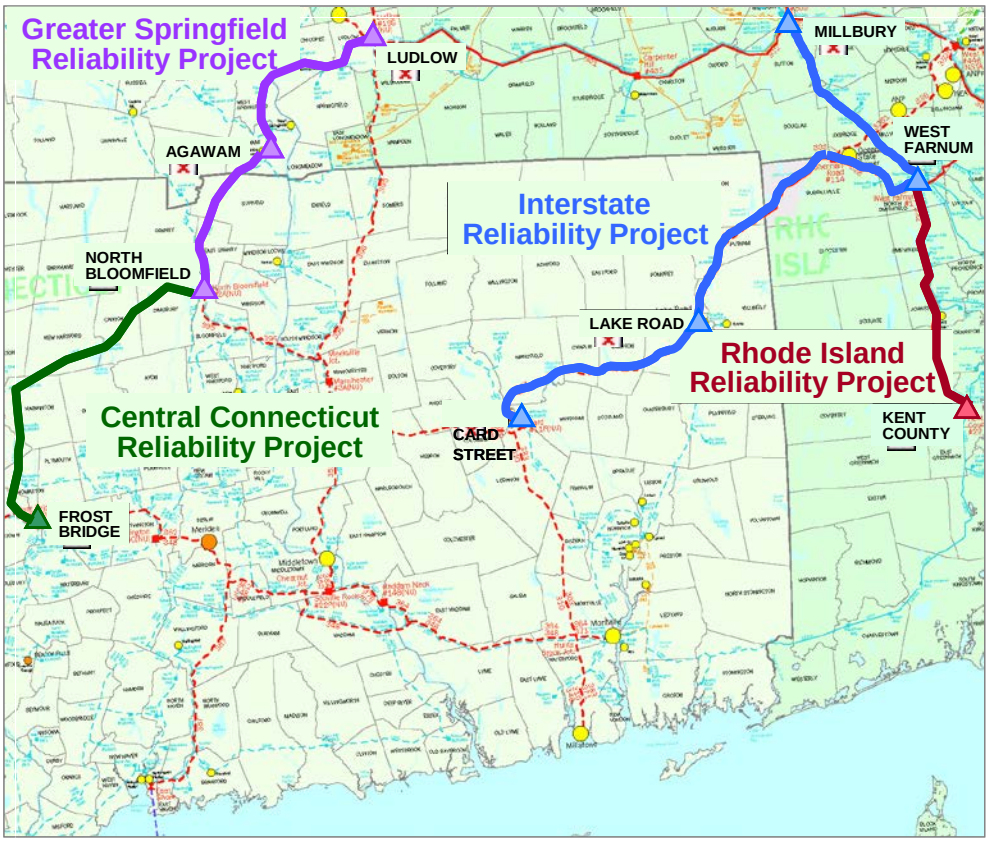
- The potential to develop large quantities of renewable resources, like solar, wind and hydroelectric power, is very low in Connecticut, but wind and hydroelectric power have greater development prospects in northern New England and Canada.
- The prospect of transporting renewable energy from northern New England and Canada to southern New England is particularly promising. Northeast Utilities, the parent company of CL&P, is currently developing a transmission project with NSTAR and Hydro-Quebec that would enable imports of up to 1,200 MW of low-carbon power generated in Canada.

4.6 The New England East – West Solution (NEEWS)

Connecticut's electric system reliability is explicitly tied to the state's ability to import electric power over the New England transmission grid. During the summer of 2006, Connecticut (including CL&P, UI and CMEEC) experienced an all-time peak demand of approximately 7,400 MW. The second highest peak demand occurred in the summer of 2011. It is becoming increasingly likely that the potential retirement of aging and uneconomic Connecticut generation will result in a condition where in-service generation and transmission imports together cannot reliably meet the growing summer peak customer demands for electric power. Under ideal system conditions Connecticut can reliably import only about 30% of the state's peak power demand, and much less if external system conditions limit transfers (such as outages of certain generators in the greater Springfield, Massachusetts area).

ISO-NE, in its 2005 Regional System Plan, first identified the need for major southern New England transmission system reinforcements to address multiple reliability problems between Connecticut, Massachusetts and Rhode Island. ISO-NE, CL&P and National Grid have since collaborated and developed a comprehensive set of interrelated transmission reinforcement projects known as NEEWS. Figure 4-1 is a graphical depiction of the new 345-kV transmission projects associated with NEEWS.

Figure 4-1: Map of NEEWS Projects



A brief description of the projects is listed below.

Greater Springfield Reliability Project – ("GSRP") and Manchester to Meekville Junction Project – (MMP)

A new 345-kV transmission tie-line connecting north-central Connecticut and western Massachusetts, will address reliability problems in the greater Springfield and north-central Connecticut areas. The new 345-kV line will connect CL&P's North Bloomfield Substation in Bloomfield to a new WMECO 345/115-kV substation being planned as an expansion of the Agawam Substation. GSRP includes the construction of a new 345-kV transmission line between WMECO's existing Ludlow 345/115-kV Substation and the new Agawam 345/115-kV Substation, as well as rebuilds and some changed circuit configurations for all existing 115-kV lines between these two substations.

The transmission solution in central Connecticut includes the Manchester to Meekville Junction Project ("MMP"). A variation of the proposed MMP was approved by the Connecticut Siting Council in 2010 that provides an additional 345-kV line segment from Manchester to Meekville Junction. This project is not shown in Figure 4-1 above. ISO-NE approved the GSRP and MMP projects in September of 2008. The GSRP and MMP projects are currently under construction.

Interstate Reliability Project

New 345-kV transmission lines connecting eastern Connecticut with Rhode Island and central Massachusetts will address reliability problems in southern New England. The project will connect CL&P's Card 345/115-kV Substation in Lebanon, Connecticut to National Grid's West Farnum Substation in Rhode Island. Along the way this project will also include new 345-kV line connections to the Lake Road Switching Station. National Grid will own the portion of new 345-kV line from the Connecticut/Rhode Island border to West Farnum Substation. The other main National Grid component of the Interstate Reliability Project is a new 345-kV transmission tie-line between its West Farnum Substation in Rhode Island and its Millbury Switching Station in central Massachusetts. This project will also increase the transmission system's ability to reliably deliver electric power across southern New England, and it will increase the ability to import electric power into the state. The need for the Interstate Reliability Project was confirmed by ISO-NE at the August, 2010 Planning Advisory Committee (PAC) meeting. Thereafter, CL&P and National Grid updated the projected in-service date for the Interstate Reliability Project to 2015. On December 23, 2011 CL&P applied to the CSC for a Certificate of Environmental Compatibility and Public Need for the construction of the Connecticut portion of the Interstate Reliability Project.

Rhode Island Reliability Project – ("RIRP")

New and modified 115-kV and new 345-kV transmission facilities will address reliability problems associated with Rhode Island's limited access to the 345-kV system and its over-dependence on local generation. These facilities are currently being constructed by National Grid.

Central Connecticut Reliability Project – ("CCRP")

A new 345-kV transmission line connecting CL&P's North Bloomfield 345/115-kV Substation in Bloomfield with the Frost Bridge 345/115-kV Substation in Watertown will address reliability problems across central Connecticut. The project will increase the delivery of electric power from eastern Connecticut to western and southwestern Connecticut. The needs reassessment of the Central Connecticut Reliability Project components of NEEWS (the fourth and last component) has been combined with the Hartford, Barbour Hill and Middletown studies to become the Greater-Hartford-Central Connecticut study.

In conclusion, NEEWS is a comprehensive plan for Connecticut and southern New England that addresses many future conditions by improving the transmission system in the following manner:

- Strengthens the bulk-power delivery systems between Connecticut, Massachusetts and Rhode Island with the addition of new high capacity 345-kV transmission circuits;

- Increases the New England east-west and regional west-east power transfer capability across southern New England;

- Provides an alternate 345-kV electric power source to the North Bloomfield Substation and establishes a new 345/115-kV "hub" west of the Connecticut River in Agawam where many existing 115-kV transmission circuits connect;

- Establishes additional 345-kV circuit connections at the Lake Road Switching Station in Killingly which will enhance the power delivery capability of the transmission network in the vicinity of the Lake Road Generating Station; and

- Establishes a new 345-kV transmission path between the North Bloomfield and Frost Bridge Substations which will increase the Connecticut transmission system's capability to move electric power across the state from east to west.

Following the completion of the NEEWS projects, Connecticut's import capability will increase to approximately 3,600 MW or approximately 45% of the state's peak load. Increasing the state's ability to import electric power from outside Connecticut will benefit customers in three ways.

- First, it will strengthen system reliability by broadening the base of power supply available to meet Connecticut customer demands via an improved interconnection of the Lake Road Generating Station and higher power import capability.

- Second, it will have a favorable impact on electric energy costs, because the same broadened base of supply should reduce the instances of reliability agreements and other congestion charges that are related to transmission system limitations.

- Third, it will help provide access to remote renewable and/or lower emission generation, helping Connecticut to meet state and federal environmental goals.

4.7 Assessment of Transmission Needs in Connecticut's Sub-areas

CL&P's service territory is sub-divided into six areas for the purpose of assessing the reliability of the CL&P transmission system. A description and a summary of the future transmission needs in each area are discussed below. Planned projects (solid red on the geographic maps indicate ISO-NE approval. Proposed projects (dotted red, on the geographic maps) are alternative projects under assessment and do not have ISO-NE approval. Station reinforcements are identified by single line entries under the "from" station title in the supporting tables. Transmission line reinforcements are identified by entries under the "from" and "to" station titles in the supporting tables. The term "station" is interchangeable with substation or switching station. Tables 4-1 through 4-5 in the following sections include information on the project's proposed in-service date ("ISD"); however, these dates may change subject to system needs.

In the future, significant changes in the geographic patterns of generating capacity and loads may affect transmission flows and transmission requirements in Connecticut and New England, and may ultimately require enhancements to the transmission system beyond those currently being considered. The addition of significant amounts of remote renewable generating capacity or the retirement of local generation may increase the need to import power into Connecticut, via an expanded New England transmission system.

Included for 2012 is the ISO-NE Regional System Plan ("RSP") status and or CL&P's Local System Plan ("LSP") status. The transmission projects listed in the six Connecticut areas are documented in the 2011 ISO-NE RSP project listing and on Northeast Utilities Local System Plan for 2011 located at www.transmission-nu.com/business/ferc890 postings.asp.

4.7.1 Southwest Connecticut Area

The SWCT, shown in Figure 4-2, is the largest load area within Connecticut and comprises fifty-four towns including all of UI's service territory. This area includes the towns essentially west of Interstate 91 and south of Interstate 84, and accounts for approximately half of the state's peak electric load demand.

Figure 4-2: Geographic Map of SWCT

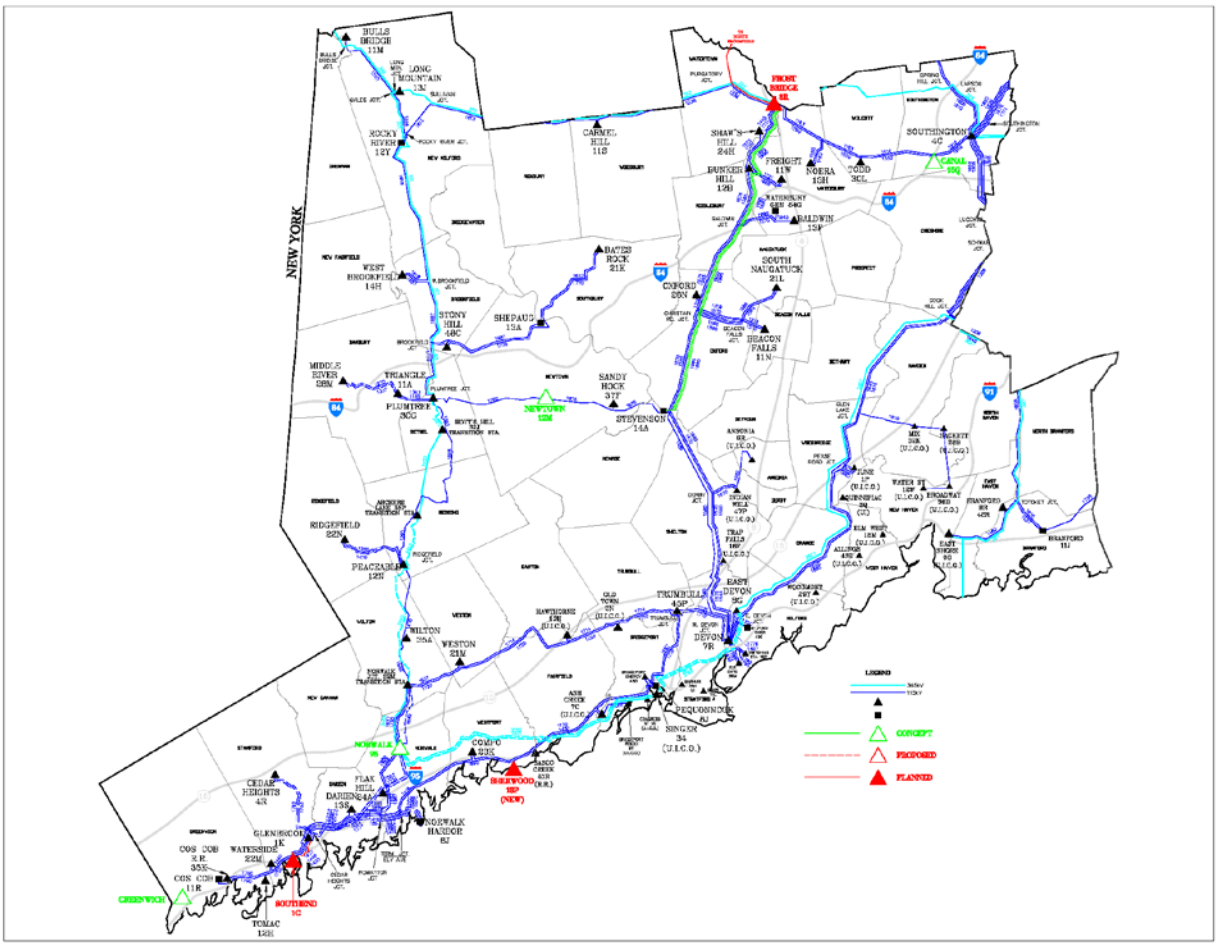


Table 4-1A: Proposed Transmission Line Projects

From Station	City or Town	To Station	City or Town	Voltage kV	ISD	Miles	Project Description	ISO-NE RSP and or LSP Status
Frost Bridge	**Watertown**	**Stevenson**	**Monroe**	**115**	**2014**	**20.5**	**Replace structures**	**Concept**
Glenbrook	**Stamford**	**South End**	**Stamford**	**115**	**TBD**	**TBD**	**Underground Cables**	**Proposed**

Table 4-1B: Proposed Substation Projects in SWCT

Substation	City or Town	Voltage kV	ISD	Project Description	ISO-NE RSP and or LSP Status
Sherwood	**Westport**	**115/13.8**	**2012**	**Add a new substation**	**Under Construction**
Newtown	**Newtown**	**115/13.2**	**2012**	**Add a distribution transformer**	**Concept**
South End	**Stamford**	**115/13.2**	**2013**	**Add a distribution transformer and make South End a five-breaker**	**Planned**
Norwalk	**Norwalk**	**115/13.2**	**2014**	**Add a distribution transformer**	**Concept**
Canal	**Southington**	**115/23**	**2015**	**Add a distribution transformer**	**Concept**
Frost Bridge	**Watertown**	**345/115**	**2017**	**NEEWS – (CCRP)**	**Planned**
Greenwich	**Greenwich**	**115/13.2**	**2017**	**Add a new substation**	**Concept**

CL&P has completed a reliability assessment and is investigating solutions for the transmission corridors between Frost Bridge and Devon Substation and between Frost Bridge and Plumtree Substation. In addition, the Stamford area will require improvements to the Stamford-Greenwich 115-kV transmission system.

Table 4-1A lists a reliability upgrade to the 115-kV transmission system and a proposed 115-kV transmission line in the Stamford area. Table 4-1B contains a listing of future substation projects that will require transmission upgrades to integrate these facilities into SWCT's regional grid. At the Newtown, South End, Norwalk, Canal and Greenwich substations the projected reinforcement plans include the installation of additional distribution transformation capability. The Sherwood Substation is a new distribution facility now under construction and needed to reliably serve local area load. Also, substation modifications are planned at Frost Bridge Substation in support of the Central Connecticut Reliability NEEWS Project. The needs reassessment of the Central Connecticut Reliability Project components of NEEWS (the fourth and last component) has been combined with the Hartford and Middletown studies to become the Greater-Hartford-Central Connecticut study and is in assessment stages.

The Southwest Connecticut (SWCT) working group presented the need assessment for this area at the January 19, 2011 ISO-NE Planning Advisory Committee meeting. In November, 2011 a SWCT update on Continuing Alternatives Analysis was presented to the ISO-NE

Planning Advisory Committee. The need included the addition of a third source into the Stamford area from Glenbrook Substation. Also included was an update regarding solutions being considered for the transmission corridors between Frost Bridge Substation and Devon Substation and between Frost Bridge Substation and Plumtree Substation.

4.7.2 Manchester - Barbour Hill Area

The Manchester - Barbour Hill Area, shown in Figure 4-3, includes towns north and south of Manchester. These include Glastonbury to the south and the Massachusetts border towns of Enfield, Suffield, and Somers to the north. The growth along the Interstate 91 and 84 corridors, especially in Manchester and South Windsor adjacent to the Buckland Hills Mall, has resulted in a need to upgrade the transmission network. Table 4-2 lists one transmission line project in the Manchester – Barbour Hill area.

Figure 4-3: Geographic Map of the Manchester – Barbour Hill Area

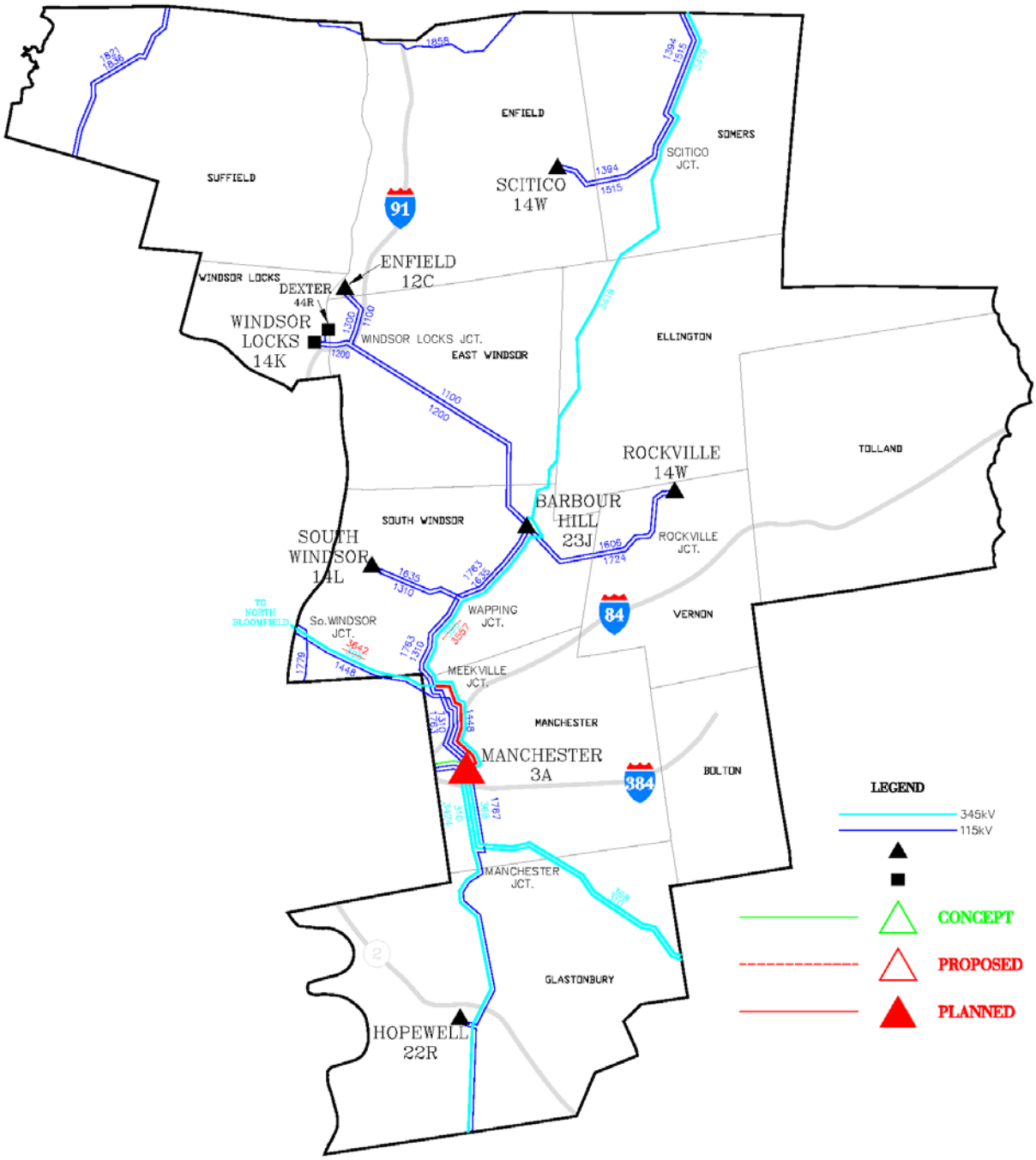


Table 4-2: Proposed Transmission Line Projects

From Station	City or Town	To Station	City or Town	Voltage kV	ISD	Miles	Project Description	ISO-NE RSP and or LSP Status
Manchester	**Manchester**	**Meekville Jct.**	**Manchester**	**345**	**2013**	**2.7**	**Split 3-terminal line***	**Under Construction**

*The MMP variation that was approved by the Connecticut Siting Council in 2010. Note: Presently, there are no substation projects proposed in the Manchester – Barbour Hill Area.

The Manchester to Meekville Junction Project is presently under construction with an in-service date of 2013.

4.7.3 Eastern Connecticut Area

The Eastern Connecticut Area, shown in Figure 4-4, extends from the Rhode Island border in a westerly direction for about twenty miles and north from Long Island Sound to the Massachusetts border. The area is served by both CL&P and CMEEC.

Figure 4-4: Geographic Map of the Eastern Connecticut Area

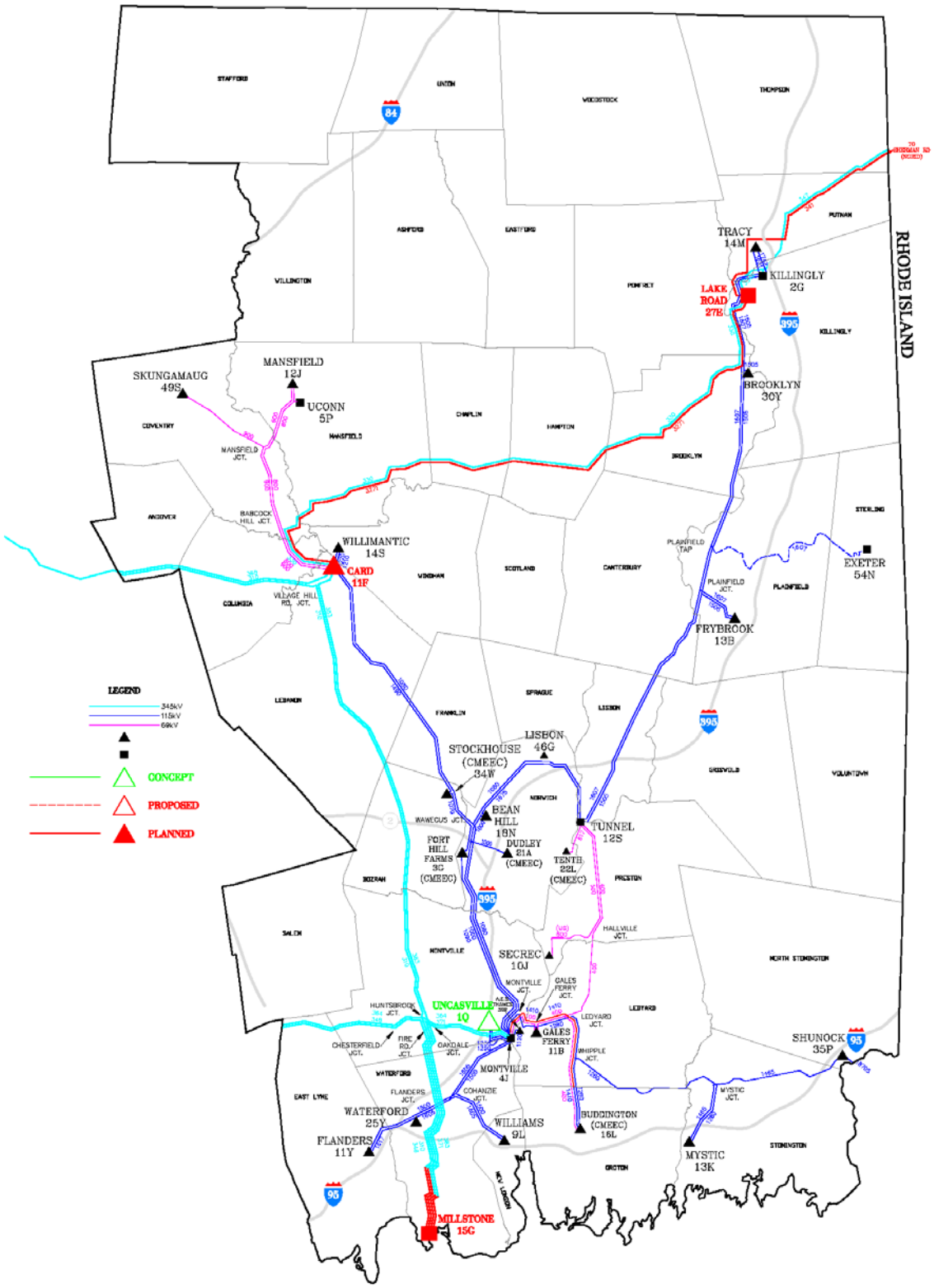


Table 4-3A: Proposed Transmission Line Projects

From Station	City or Town	To Station	City or Town	Voltage kV	ISD	Miles	Project Description	ISO-NE RSP and or LSP Status
Millstone	**Waterford**	**Manchester**	**Manchester**	**345**	**2013**	**4.0**	**Circuit separation**	**Planned**
Millstone	**Waterford**	**Haddam/ Beseck**	**Haddam/ Wallingford**	**345**	**2013**	**4.0**	**Circuit separation**	**Planned**
Millstone	**Waterford**	**Montville**	**Montville**	**345**	**2013**	**2.0**	**Circuit separation**	**Planned**
Millstone	**Waterford**	**Card**	**Lebanon**	**345**	**2013**	**2.0**	**Circuit separation**	**Planned**
Card	**Lebanon**	**Lake Road**	**Killingly**	**345**	**2015**	**29.3**	**NEEWS - Interstate**	**Planned**
Lake Road	**Killingly**	**CT/RI Border**	**Thompson**	**345**	**2015**	**7.6**	**NEEWS - Interstate**	**Planned**
Montville	**Montville**	**CL&P/CMEEC Border**	**Ledyard**	**115**	**2015**	**6.8**	**Line Sag elimination**	**Planned**
Millstone	**Waterford**	**Manchester/Card**	**Manchester/ Lebanon**	**345**	**TBD**	**N/A**	**Loop 310 line into Card**	**Planned**

Table 4-3B: Proposed Substation Projects

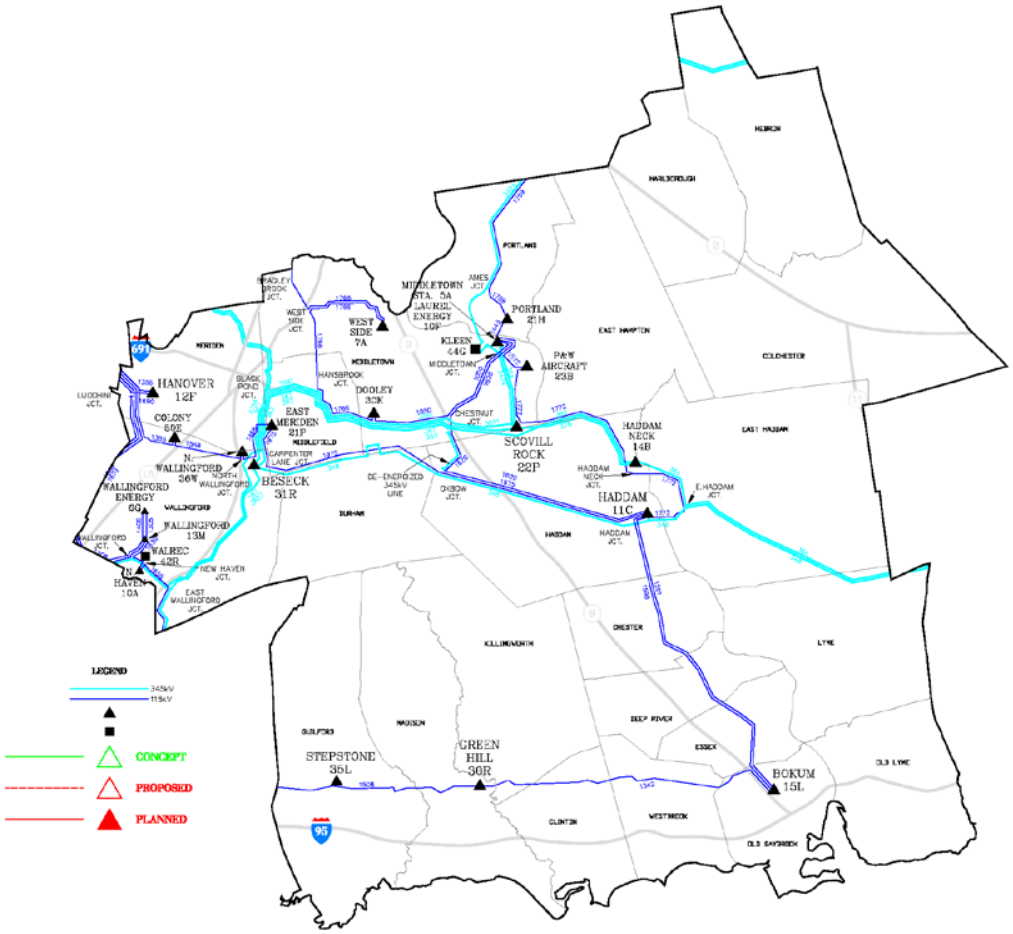
Substation	City or Town	Voltage kV	ISD	Project Description	ISO-NE RSP and or LSP Status
Uncasville	**Montville**	**115/13.2**	**2015**	**Replace both transformers with larger capacity transformers**	**Concept**
Card	**Lebanon**	**345**	**2015**	**NEEWS - Interstate**	**Planned**
Lake Road	**Killingly**	**345**	**2015**	**NEEWS - Interstate**	**Planned**

Table 4-3A lists two circuit separations (i.e., two double-circuit line segments become four single-circuit line segments) and the transmission circuit additions and or upgrade associated with the Interstate Reliability Project, one of the NEEWS Projects. The last entry loops the 310 345-kV Millstone to Card line into Card Substation in Lebanon. This project is currently under reevaluation as part of the Greater Hartford Central Connecticut Project and is not shown on the map. Table 4-3B lists a proposed reliability upgrade at the Uncasville substation. Also, included are the future 345-kV substation modifications planned for the Card and Lake Road substations in regard to the Interstate Reliability NEEWS Project. On December 23, 2011 CL&P applied to the CSC for a Certificate of Environmental Compatibility and Public Need for approval to construct the Connecticut portion of the Interstate Reliability Project.

4.7.4 Middletown Area

The Middletown Area, shown in Figure 4-5, consists of a five- to ten-mile wide band east and west of the Connecticut River from Hebron to Old Lyme. The westerly section consists of the area included in a triangle that runs from Middletown to Old Saybrook and back to the eastern part of Meriden. The Kleen Energy facility in this area was placed in service in July 2011. At present there are no proposed transmission line or substation projects in this area that would have been included in Tables 4-4A and 4-4B respectively. This area is currently being evaluated under the Greater-Hartford-Central Connecticut study.

Figure 4-5: Geographic Map of the Middletown Area



4.7.5 Greater Hartford Area

The Greater Hartford Area, shown in Figure 4-6, is the towns in the vicinity of the Capitol city and stretches north to the Massachusetts border, west to the Farmington River, and south to the Route 691 interchange with the Berlin Turnpike. It straddles the Connecticut River in the heart of central Connecticut.

Figure 4-6: Geographic Map of the Greater Hartford Area

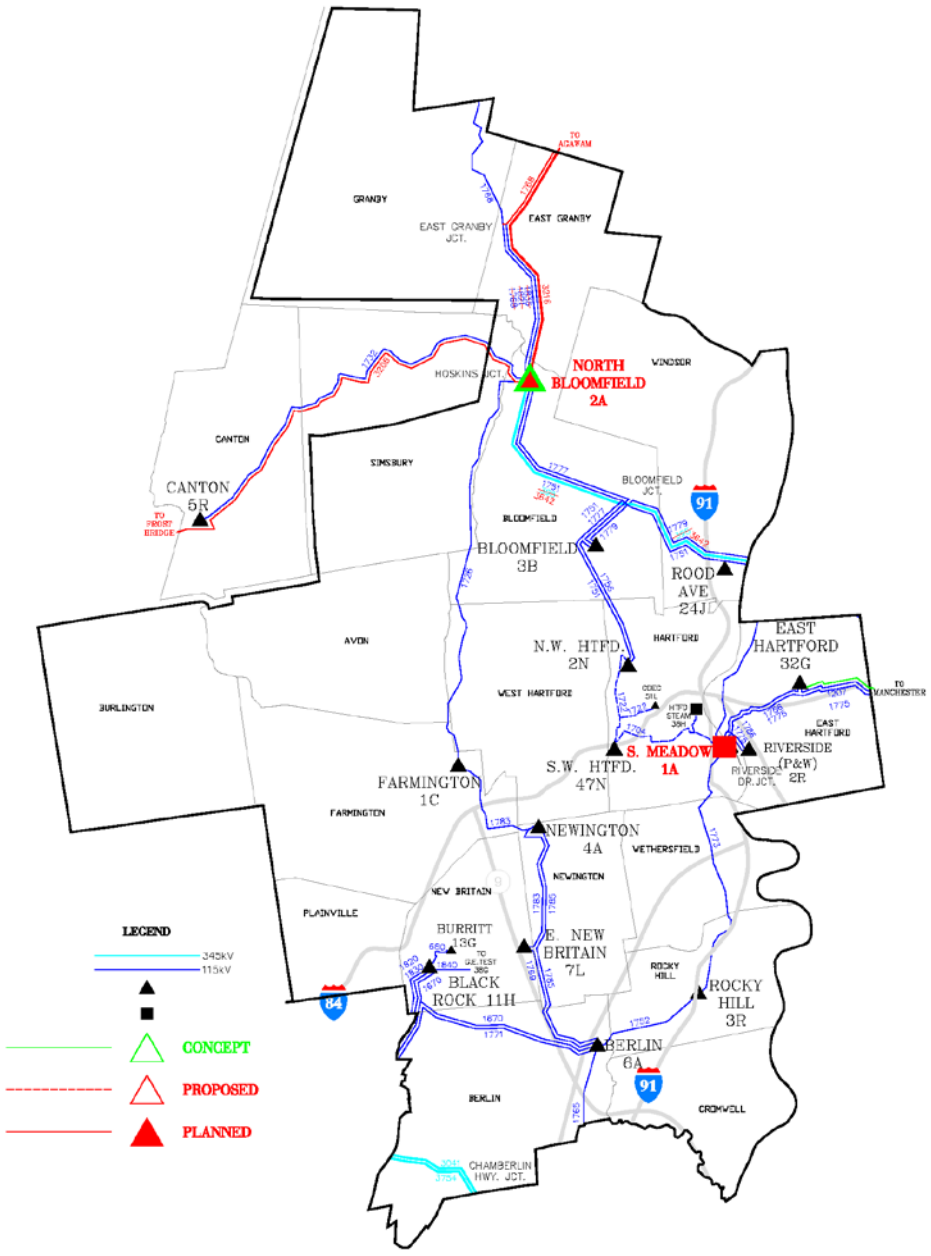


Table 4-5A: Proposed Transmission Line Projects

From Station	City or Town	To Station	City or Town	Voltage kV	ISD	Miles	Project Description	ISO-NE RSP and or LSP Status
North Bloomfield	**Bloomfield**	**CT/MA Border**	**Suffield**	**345**	**2013**	**12.0**	**NEEWS – GSRP**	**Under Construction**
North Bloomfield	**Bloomfield**	**CT/MA Border**	**Suffield**	**115**	**2013**	***11.9**	**NEEWS – GSRP**	**Under Construction**
North Bloomfield	**Bloomfield**	**CT/MA Border**	**Suffield**	**115**	**2013**	***11.9**	**NEEWS – GSRP**	**Under Construction**
North Bloomfield	**Bloomfield**	**CT/MA Border**	**Granby**	**115**	**2013**	***8.7**	**NEEWS – GSRP**	**Under Construction**
Manchester	**Manchester**	**East Hartford**	**East Hartford**	**115**	**TBD**	**3.2**	**New transmission line**	**Concept**

*Actual existing line mileage in Connecticut, portions of which will be removed. Remaining sections of each line will be connected together to operate as a part of a single South Agawam to Southwick 115-kV circuit.

Table 4-5B: Proposed Transmission Substation Projects

Substation	City or Town	Voltage kV	ISD	Project Description	ISO-NE RSP and or LSP Status
North Bloomfield	**Bloomfield**	**345**	**2013**	**NEEWS - GSRP**	**Under Construction**
South Meadow	**Hartford**	**115**	**2013**	**Upgrade to Bulk Power System requirements**	**Planned**
North Bloomfield	**Bloomfield**	**115/23**	**2015**	**Add a distribution transformer**	**Concept**

Table 4-5A contains a listing of future transmission reinforcement projects for the Greater Hartford area. The table identifies transmission line projects associated with NEEWS Greater Springfield Reliability Project. One new 345-kV transmission circuit is planned to tie the North Bloomfield Substation with the new 345/115-kV substation additions in Agawam, Massachusetts. In addition, the three existing 115-kV transmission circuits from North Bloomfield Substation to Massachusetts substations will be disconnected from North Bloomfield Substation and modified. The GSRP project is presently under construction. Table 4-5B includes 345-kV modifications which are under construction for the 345-kV North Bloomfield Substation in regard to the NEEWS GSRP project. Also included is a Bulk Power System requirement at the South Meadow Substation in Hartford. The needs reassessment of the Central Connecticut Reliability Project component of NEEWS is now part of the Greater-Hartford-Central Connecticut study.

4.7.6 Northwestern Connecticut Area

The Northwestern Connecticut Area, shown in Figure 4-7, is the portion of the state bounded north and west by the Massachusetts and New York state borders easterly toward Route 8 and southerly to the SWCT region.

Figure 4-7: Geographic Map of the Northwestern Connecticut Area

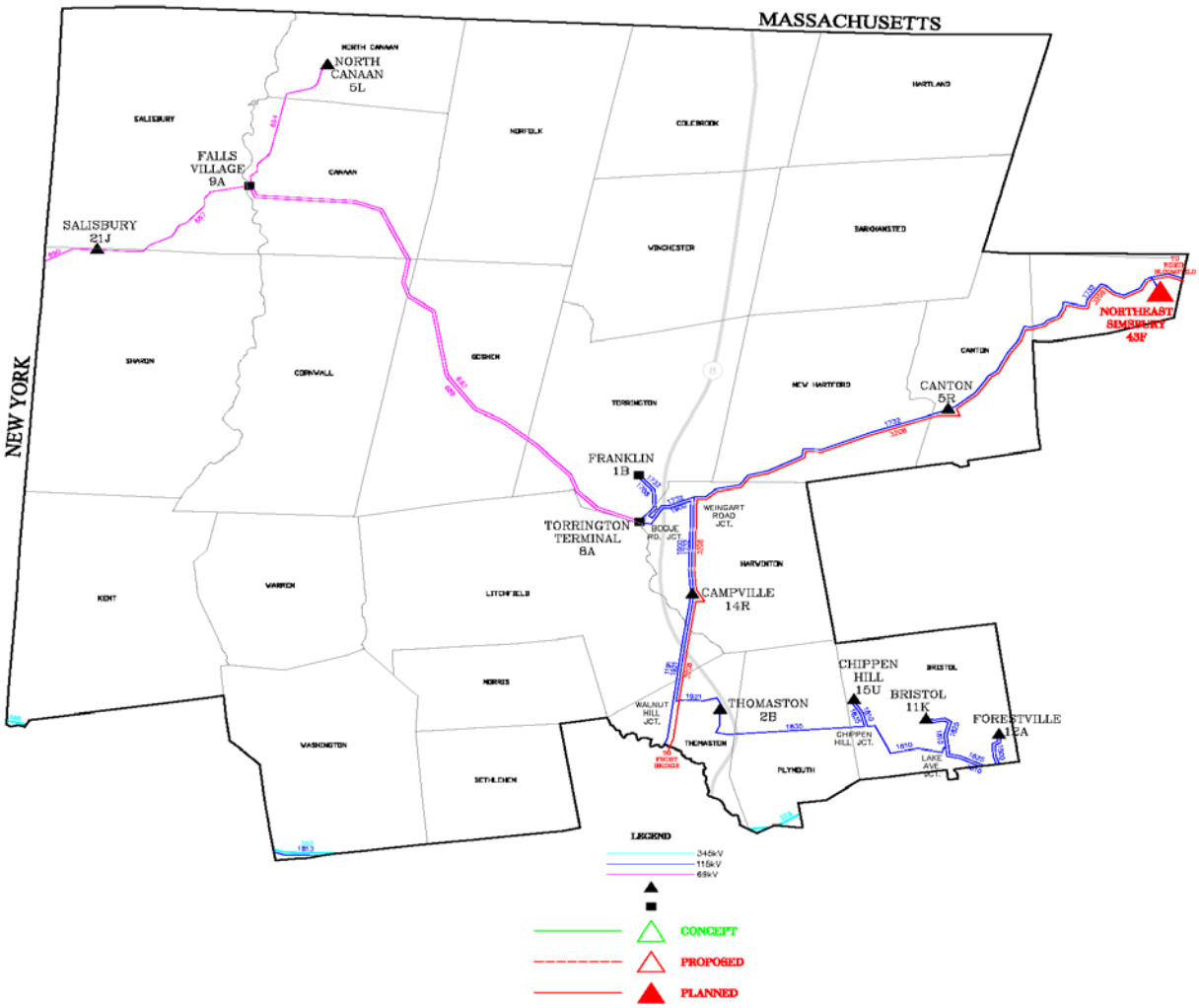


Table 4-6A: Proposed Transmission Line Projects

From Station	City or Town	To Station	City or Town	Voltage kV	ISD	Miles	Project Description	ISO-NE RSP and or LSP Status
Frost Bridge	**Watertown**	**North Bloomfield**	**Bloomfield**	**345**	**2017**	**35.4**	**NEEWS - CCRP**	**Planned**

Table 4-6B: Proposed Substation Projects

Substation	City or Town	Voltage kV	ISD	Project Description	ISO-NE RSP and or LSP Status
Northeast Simsbury	**Simsbury**	**115**	**TBD**	**Breaker Addition**	**Planned**

Table 4-6A identifies a transmission line project associated with NEEWS. This project includes a new 345-kV circuit between the North Bloomfield Substation in Bloomfield and the Frost Bridge Substation, in Watertown, Connecticut. The needs reassessment of the Central Connecticut Reliability Project components of NEEWS has been combined with the Hartford and Middletown studies to become the Greater-Hartford-Central Connecticut study and is in early stages. In the Torrington, Salisbury, and North Canaan area, CL&P is also evaluating the existing 69-kV transmission system. Table 4-6B lists a proposed reliability upgrade at the Northeast Simsbury Substation.

4.8 Incorporation of Renewables through Transmission including future outlook

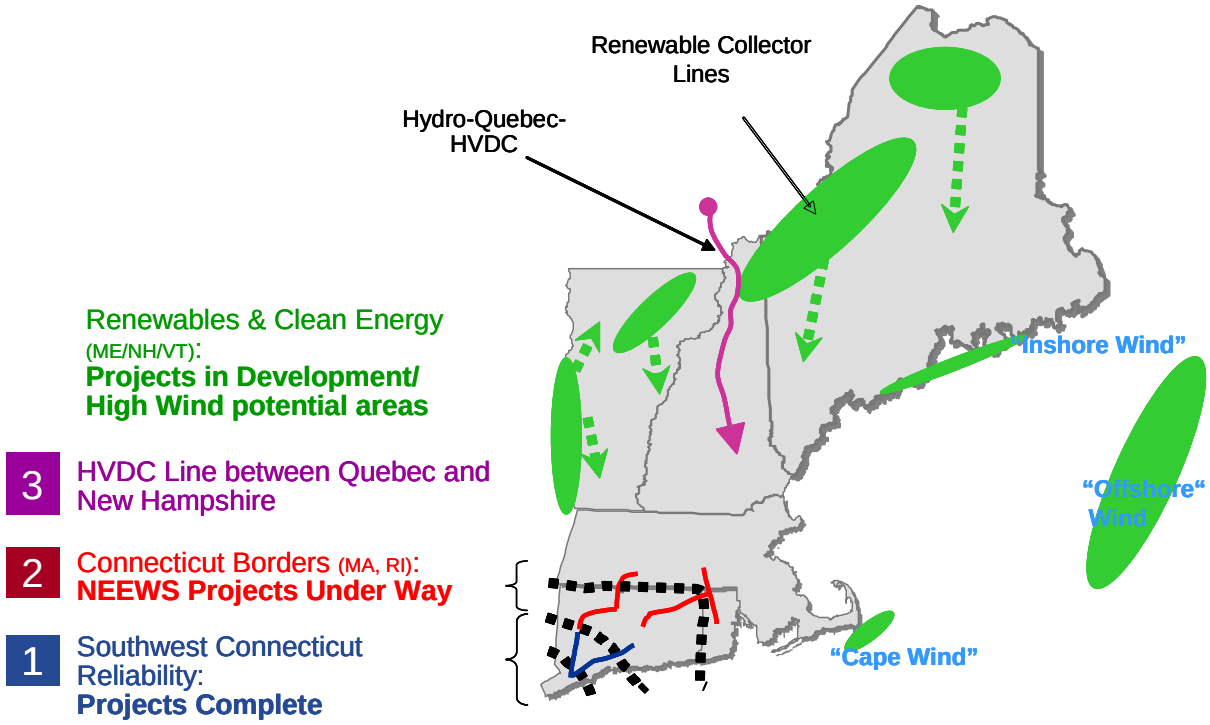
Transmission plays an essential role in providing access to remote renewable electric energy resources. Renewable resources like wind and hydro power will likely not be sited close to load centers, so transmission will be needed to move this power to the load. The prospect of transporting renewable energy from northern New England and Canada is particularly promising.

Long-term forecasts show surplus renewable generation in the eastern provinces of Canada and insufficient generation in Ontario, New York, and New England. Strengthening Connecticut's transmission interconnection with the rest of New England will give the state an opportunity to share in the region's access to Canada's projected surplus power. NU and NSTAR have studied various options and have proposed a high-voltage direct current transmission tie line with Hydro Quebec (Northern Pass Transmission Project "NPT") which would provide New England access to competitively priced non-carbon emitting hydroelectric power.

The NPT has received FERC approval of a transmission service agreement with Hydro Renewable Energy Inc. (Hydro Quebec) and the federal siting approval process with the U.S. Department of Energy has begun.

The Eastern Interconnection Planning Collaborative ("EIPC") is a first-ever effort to involve Planning Authorities in the entire Eastern Interconnection in analyzing various energy policy options of interest to state, provincial, and federal policy makers

Figure 4-8: Map of Potential Renewable Resources



4.9 Underground Transmission and Cost

Transmission line siting dockets in recent years have established that the electrical characteristics and other attributes of underground transmission lines make such lines difficult to incorporate within the existing Connecticut transmission system, especially at 345-kV. System reliability issues created by underground lines are not always feasible or inexpensive to manage. Public concern over the magnetic fields that surround power transmission lines has been a driver for public pressures to construct new transmission lines underground; however, underground transmission lines also produce magnetic fields in publicly accessible locations.

Some of CL&P's recent transmission line projects have required applications of underground transmission cables, including cables operating at 345 kV. As part of CL&P's Bethel-Norwalk Project, 6.4 miles of existing 115-kV overhead transmission line was replaced by approximately ten miles of underground 115-kV transmission cables. Approximately twelve miles of parallel 345-kV underground cables also entered service in 2006 as part of a new 20.4-mile long 345-kV circuit, including a first use of 2.1 miles of solid dielectric cables. As part of the Middletown-Norwalk Project, CL&P's new transmission facilities as of 2009 include approximately thirty-four new circuit miles of underground 345-kV solid dielectric cables, and one mile of overhead 115-kV line was replaced by underground 115-kV cables. Also, two new 115-kV underground cable circuits, each almost nine miles long, were completed as part of the Glenbrook Cables Project. Finally, the Long Island Cable Project from Norwalk Harbor to Northport Long Island, New York

was completed in 2008. One of the Middletown-Norwalk cables failed in 2010 causing a circuit to be out of service for 5 weeks. And one of the new cables in Long Island Sound failed in 2009 leading to an outage of one circuit for approximately 2.5 years.

Cost

The CSC's 2007 Life-Cycle Costs of Electric Transmission Lines Report made clear that the initial and life-cycle costs of underground 115-kV and 345-kV transmission line are typically several times higher than the cost of an equal length of overhead transmission line when sufficient right-of-way already exists to accommodate the overhead line. CL&P expects that the Council's 2012 update of this report will show a similar comparison.

APPENDIX I

UNITED ILLUMINATING, *REPORT TO THE CONNECTICUT SITING COUNCIL ON LOADS AND TRANSMISSION RESOURCES*

Report to the Connecticut Siting Council on Loads and Transmission Resources

March 1, 2012

The United Illuminating Company
157 Church Street
New Haven, CT 06506

The United Illuminating CompanyReport to the Connecticut Siting Council on Loads and Transmission Resources March 1, 2012

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Section I. Load Forecast Update

This section presents the results and a summary of the methodology for The United Illuminating Company's ("UI" or "Company") most recent ten-year energy sales forecast ("Sales Forecast") and ten-year system peak load forecast ("Peak Load Forecast"). The Sales Forecast is used for budgeting and financial planning purposes. The Peak Load Forecast is used by the Connecticut Siting Council ("Council" or "CSC") for resource planning purposes in Connecticut. The two forecasts use different forecasting methodologies chosen to fulfill their intended purpose.

Sales Forecast Purpose & Methodology

The primary purpose of the Sales Forecast is to accurately project monthly sales-by-class that is then converted to a revenue forecast using electric service rates by class. The principal output of the Sales Forecast is monthly energy sales. UI utilizes the ten-year Sales Forecast for a number of purposes. A key use of the Sales Forecast is to project the energy sales as the basis for predicting revenue over the next 12 to 24 months. The UI Sales Forecast produces monthly forecasted energy sales weather-adjusted to "normal weather" or average weather conditions.

Weather has a large impact on both sales and peak load. Any analysis of the actual historical sales and peak load must consider the weather conditions under which those sales and peak loads occurred. The Company's sales forecasting process begins by weather-adjusting the actual, customer-class specific, historical sales data to the sales that would have been experienced under normal weather, using heating degree days ("HDD") and cooling degree days ("CDD") based on a standard of 65 degrees Fahrenheit for the transition from heating-based to cooling-based sales.

The sales forecasting process then moves to the creation of a Base Energy Sales Forecast which reflects the projected sales from UI's existing base of customers. The Base Sales Forecast development employs focused analytical processes that weather-adjusts and evaluates the most recent energy sales history of its customers, trends in the local and state economies and the sales forecast team's interpretations of how these factors are likely to impact UI's future monthly sales.

The impact to sales from Conservation and Load Management ("C&LM") and Distributed Generation ("DG") currently on the UI system are embedded in the historical data used to develop the Base Energy Sales Forecast, and therefore, the future impact of these resources is accounted for in the Base Energy Sales Forecast results. UI adds to the Base Energy Sales Forecast the projected future annual impact of incremental additions of new C&LM and DG to account for the future additions of these resources.

In addition, UI adds an estimate of sales resulting from specific, new customers projected by UI's Economic Development group. The addition of new customers is another variable that can materially impact sales and peak loads. UI's Economic Development group creates regular projections of new customer additions and deletions to the system based on their interaction with municipalities, Account Managers, potential developers and businesses. These new loads include expansions of existing UI customers, redevelopment of existing areas and new "green field" construction. UI's final Sales Forecast results from the summation of the normal weather-adjusted Base Energy Sales Forecast and new large customer sales along with the decrement to sales due to projected C&LM and DG.

Peak Load Forecast Purpose & Methodology

The purpose of the peak load forecast shown in Exhibit I is to allow the Council to effectively forecast and evaluate the demand and supply balance in Connecticut. The primary output of UI's Peak Load Forecast is the forecast of system peak loads under both normal and extreme weather conditions. Normal weather or average weather, also referred to as a 50/50 forecast, means the data provides a 50% confidence, from a statistical perspective, that forecasted normal weather-adjusted system peak will be exceeded 50% of the time on the peak load day, due to weather conditions. Extreme weather, also referred to as a 90/10 forecast, means the data provides a 90% confidence, from a statistical perspective, that the forecasted extreme weather-adjusted system peak will be exceeded only 10% of the time on the system peak day, due to weather conditions. In other words, the forecasted 90/10 peak load will be exceeded once every ten years.

The UI Peak Load Forecast is a derivative of a quarterly sales forecast and forecasted customer class-level load factors. The forecast of quarterly sales used for the Peak Load Forecast is strictly an interim calculation step that utilizes a different forecasting methodology than the revenue-focused Sales Forecast described above. The Peak Load Forecast is derived from weather-adjusted sales that use an average monthly temperature methodology to weather-adjust the sales. This is different than the method used in the revenue-focused Sales Forecast described in the prior section. For the Peak Load Forecast development, the Company first uses customer-class specific regression models to weather-adjust the historic sales data to equivalent sales that would be seen under normal weather conditions based on 30-years of historical weather data. The normal weather-adjusted sales data is then used to develop a series of econometric models for each major customer class which relates the sales to economic and demographic drivers, obtained from independent sources. The parameters used in the individual

econometric models vary by the customer class. The models are then used to produce forecasts of quarterly sales for each major customer class under normal weather conditions.

Next, UI calculates the weather-adjusted historical system peak loads for both normal weather and extreme weather conditions. The weather-adjustment for historic peak loads is based on a model that relates the twelve-hour average Temperature Humidity Index (the output of a mathematical formula that combines temperature and humidity into a single number) to historical summer weekday peak loads (THI Model). The THI Model is then used to adjust historic peak loads to the loads that would have been seen under normal or average temperature and humidity conditions and for extreme conditions.

The weather-adjusted sales and peak loads in conjunction with load research data are used to calculate historical class-level load factors and forecast class-level load factors for both normal and extreme weather conditions. The forecasted class-level load factors are then used to translate the class-level annual sales into a Base Load Forecast for both normal and extreme weather-adjusted conditions. The Base Load Forecast reflects the forecasted peak load resulting from UI's existing levels of C&LM, DG and existing base of customers. Similar to the Sales Forecast, the Company accounts for projected new C&LM, DG and new or removed large customer loads separately. UI's final Peak Load Forecast results from the summation of the Base Load Forecast and new or removed large customer loads along with the impact due to incremental additions of new C&LM and DG.

Normal Weather-Adjusted Historical and Forecasted Data

The data shown in Exhibit 1 includes actual historical data for system energy requirements, sales and peak load. Exhibit 1 also includes historical and forecasted sales and peak load adjusted to normal weather conditions. UI is a summer peaking utility primarily due to the air conditioning loads on its system. During recent history, between 2002 and 2011, UI has experienced a decline in normal weather-adjusted sales (-3.5% sales growth) as compared to a simultaneous increase in its normal weather-adjusted peak load (+1.0% peak load growth). This is attributed to changes in customer behavior regarding energy usage, the recession along with an increase in air-conditioning loads. It should be noted that in four of the last ten years of historical data (2002, 2006, 2010, and 2011), the actual peak load has exceeded the normal weather-adjusted peak load. This exceedance is consistent with the design of the normal weather adjustment in that typical variations in weather alone will cause the normal weather-adjusted value to be exceeded 50% of the time on the peak load day. This recent history of peak loads reinforces the need for the Company to consider extreme weather in its Peak Load Forecasts. The forecast of the normal weather-adjusted peak load projects a growth of 9.9% between 2011 and 2021. However, the forecast of sales projects a growth of only 6.7% during the same period because incremental C&LM counteracts a portion of the incremental sales increases of the existing customer base and new customers. This year's Sales Forecast is higher than last year's due to a combination of drivers. These include a projected stronger economic recovery and a reduction in the future impact of DG within the forecast. The normal weather-Adjusted Peak Load Forecast is lower than last year's forecast (53 MW lower in year 2020).

Extreme Weather-Adjusted Historical and Forecasted Data

In addition to the normal weather-adjusted data, Exhibit 1 also shows historical and forecasted peak loads adjusted to extreme weather conditions. The 2002 to 2011 historical data in Exhibit 1 shows growth in both the extreme weather-adjusted historical Peak Loads (+5.1% growth) and the historical normal weather-adjusted Peak +1.0% growth. The Company's extreme weather-adjusted Peak Load Forecast shows a growth of 13.3% during the period from 2011 to 2021. This forecasted growth is less than last year's due to the continued impacts of the economic recession in the short term. The extreme weather-Adjusted Peak Load Forecast percentage growth is lower for this year's forecast than last year's forecast (for the full ten-year period of the respective forecast). The forecasted extreme weather peak in year 2020 is 69 MW lower than last year's forecast due to the economic impact on the short term forecast peak load and the actual 2011 peak load.

The ability to predict when extreme weather will occur or the exact amount of economic activity that will be realized is always problematic. Therefore, prudent planning requires that the possibility of the effects of extreme weather (i.e., high temperatures and high humidity) within the forecast time period be recognized, as well as appropriate assumptions of future economic development activity. Plans must be formulated to meet this possible demand. The bounds of the Company's forecasts from the normal and extreme weather-adjusted scenarios are intended to provide a plausible range of futures. No single forecast will be accurate throughout the forecast period. When extreme weather occurs, regardless of the timing, the system infrastructure must be in place to serve the load safely and reliably[1].

[1] The purpose of the peak load forecast shown in Exhibit I is to allow the Council to effectively forecast and evaluate the demand and supply balance in Connecticut.

UI Peak Load Scenario for ISO-NE Regional Transmission Planning

The Company has also developed a forecast of peak loads that is comparable to the assumptions used in the development of the Independent System Operator-New England ("ISO-NE") Capacity, Energy, Loads and Transmission ("CELT") peak load forecast and is provided for informational purposes in Exhibit 2. This Peak Load Scenario excludes all C&LM, DG and potential new large customer loads in order to be consistent with the ISO-NE treatment of loads and resources in their regional planning.

Distributed Generation

The Connecticut General Assembly passed a landmark legislative initiative in 2005: Public Act 05-01, June Special Session, *An Act Concerning Energy Independence* ("PA 05-01"). The implementation of the Act, carried out by the former DPUC, provided monetary grants to offset the capital cost of installing DG, but the program was discontinued for all projects that submitted applications on or after October 14, 2008. The program has so far successfully added about 36 Megawatts of DG capacity in the UI service territory.

On July 1, 2011, Governor Malloy signed into law Public Act 11-80, *An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future* ("PA 11-80"). Section 103 of PA 11-80 establishes a three year pilot program to promote the development of combined heat and power projects as well as a three year pilot program for anaerobic digestion projects to generate electricity and heat. The PA 11-80 DG grant program offers significantly lower dollar incentives than those provided through the earlier program established in PA 05-01, capped at $200 per kilowatt of capacity. UI will continue to monitor the development of the DG pilot program established through PA 11-80.

Grants approved through the PA 05-01 DG program totaling 8.5 Megawatts[2] of capacity are awaiting a customer decision that must occur before the three-year timeframe runs out in June, 2012. Some uncertainty exists regarding the ultimate outcome of these projects and any new projects potentially submitted after the Department of Energy and Environmental Protection ("DEEP") re-energizes the program. Even with the grants made available, each customer must decide for themselves, within the timeframe allotted, whether the installation is economically attractive. Because many of the best DG opportunities have been installed, the monetary grants

[2] Operational DG output is based on capacity listed on grant application and not the actual generator output.

offered through the new program are not expected to create a significant increase in the installed base of DG.

In development of the sales forecast shown in Exhibit 1, those projects no longer anticipated have been excluded from the sales forecast and an 85% capacity factor was utilized for forecasted units. The incremental annual impact of DG to the sales forecast is 53.4 GWh in 2012 and none in any subsequent years.

In development of the peak load forecasts presented in Exhibit 1, all of the operational units have been included as offsets to load (utilizing actual generator output). Regarding forecasted units, one project entered service on October 1, 2011 (10.4 MW), and an additional 4.4 MW are forecasted for 2012 representing 50% of the total capacity of the forecasted projects for the year. The incremental reduction in system peak load forecast due to DG is projected to be 14.8 MW in 2012 and none in subsequent years.

Conservation & Load Management

The C&LM 2012 programs continue to experience enthusiastic participation in response to UI's commitment to maximize the benefits our customers receive from every dollar spent. The existing 3 mill Combined Public Benefits Charge provides most of the funding for the C&LM programs. Additionally, the Electric Distribution Companies ("EDCs") actively pursue and secure additional sources of program dollars, including the Regional Greenhouse Gas Initiative ("RGGI"), the ISO-NE Forward Capacity Market ("FCM"), the Connecticut Class III Renewable Energy Credits ("RECs") program, and grants such as a two year $3 million grant from the U.S. Department of Energy ("DOE"). In a time of economic uncertainty, the 2012 C&LM Programs further expand UI's solid record of delivering value, showcasing new technologies, and cultivating positive relationships with communities (including the financial community), leading to the explosion of the energy efficiency and conservation market.

Among other additional funding sources, The American Recovery and Reinvestment Act of 2009 ("Stimulus Act" or "ARRA") has provided recently Connecticut with a significant increase in resources for energy efficiency. In 2009 UI received $2.3 million from the Stimulus Act and allocated it towards the Home Energy Solutions, Energy Opportunities and Small Business programs. The State of Connecticut also received an additional $3.4 million for an appliance rebate program. While there is no additional funding from ARRA included as part of the current load forecast, an additional federal grant in the amount of $3 million over two years was awarded through the DOE Weatherization Innovation Pilot Program ("WIPP").

Funds from the Regional Greenhouse Gas Initiative ("RGGI") and Class III RECs remain to augment the three-mill Public Benefits Charge on customers' electric bills. RGGI is the first mandatory, market-based effort in the United State to reduce greenhouse gas emissions. The participating RGGI states cap allowable CO_2 emissions, sell emissions allowances through

auctions, and use the auction proceeds to fund energy efficiency, renewable energy, and other clean energy programs and technologies.

In 2010, the transition period for the Forward Capacity Market ("FCM") ended, and the permanent FCM was put in place beginning June 1, 2010 by the ISO-NE. As New England's energy markets continue to develop and evolve, the Company continues to be an active participant in the development of the ISO-NE stakeholder process to refine the markets. The FCM allows market participants to bid their peak demand savings into the capacity market. Market participants earn capacity payments for qualifying resources, such as distributed generation, energy efficiency, load management or load response. This was the first time in the United States that reduction in demand through energy efficiency and demand response programs was considered as electrical capacity equivalent to supply-side generation sources. Additional electrical capacity "produced" through the implementation of efficiency and load management measures becomes a resource, which can then be bid to ISO-NE similar to new generation. UI has entered peak demand savings from energy efficiency and load management projects into the transition period FCM on behalf of the Connecticut Energy Efficiency Fund and has successfully bid capacity in the first five capacity auctions, with a sixth auction scheduled for April, 2012. In addition, UI is an active demand response provider with over 70 MW of capacity currently enrolled.

In response to a request from DEEP and in support of Governor Malloy's energy efficiency goals, the EDCs prepared an "Increased Savings" scenario (for the year 2012 only) in addition to the business-as-usual "Base Budget" projections in the 2012 C&LM plan. This scenario results in more than doubling both the annual savings and the associated budget. Although the amount of funding required has been identified, the source of that funding has not been established. Pending approval of this major expansion of the energy efficiency programs,

the increased level will put the state on the right path to have 80% of the state's homes to be weatherized by 2030, another goal established in PA 11-80.

PA 11-80 also assigned the responsibility for development of the 2012 Integrated Resource Plan ("IRP") to the DEEP. PA 07-242, *An Act Concerning Electricity and Energy Efficiency* ("2007 Act"), established the initial integrated resource planning ("IRP") process, which resulted in the EDCs preparing the three previous IRPs. DEEP produced the report in consultation with the EDCs and with analytical assistance from The Brattle Group, an economic consulting firm. The 2012 IRP presents a long-term, "Expanded EE" resource scenario for Demand Side Management ("DSM") that goes above and beyond the base level DSM (business as usual) strategy presented in the 2012 C&LM Plan. The Expanded EE forecast reflects a major expansion of current programs and was constructed based on the 2010 Connecticut energy efficiency potential study completed by the Energy Conservation Management Board ("ECMB")[3]. The IRP predicts that achieving this potential would cause Connecticut's energy consumption to decline by 0.4% per year while supporting a growing economy.

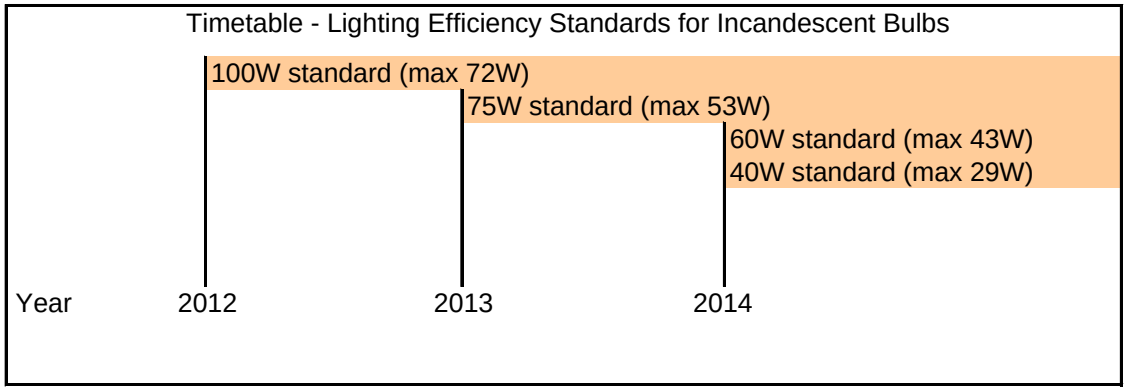
Both the 2012 C&LM Plan and the 2012 IRP are undergoing regulatory review. The immediate result of the higher scenarios may, at minimum, stimulate increased program activity and associated benefits earlier in the year. On the other hand, approval and successful implementation of the "Increased Savings" C&LM Budget could potentially double the energy savings compared to the base forecast used in the development of the sales and peak load forecasts presented in Exhibit 1. The 2012 Proposed Base Budget was reviewed under PURA Docket No. 12-02-01, *PURA Review of the Connecticut Energy Efficiency Fund's Electric Conservation and Load Management Plan for 2012*, and received DEEP approval on February 17, 2012. The Increased Savings Budget will be reviewed under a different proceeding than the Base budget, but could be approved as early as June, 2012.

[3] In 2010 the ECMB changed its name to the Energy Efficiency Board ("EEB").

Legislation has effected substantial change to the lighting portion of C&LM programs. Beginning in 2012, pursuant to the Energy Independence and Security Act of 2007, nationwide lighting efficiency standards ("Lighting Efficiency Standards") will be implemented. The purpose of the Lighting Efficiency Standards is to introduce minimum energy performance standards for General Service incandescent bulbs that will, over a period of time, remove inefficient lighting products from the marketplace. The timetable for compliance is set forth below. Incandescent bulbs will be available in 2012 and beyond if they meet the Lighting Efficiency Standards guidelines. Non-standard bulbs will likewise not be affected by the 2012-2014 standards.

The phase-in of the federal standards means that a third of the annual savings for general service Compact Fluorescent Light bulbs ("CFLs") will be not be attributable to the C&LM programs. As lighting makes up a significant portion of the program offerings and savings in every sector, particularly concerning CFLs in the residential programs, UI continues to monitor the development of lighting products that meet the new standard to determine what savings may be achieved from the installation of CFLs. In addition to determining the role of CFLs as an energy saving technology, UI continues to investigate non-CFL technologies that achieve savings beyond the standard such as LED or induction lighting. Many LED bulbs have been ENERGY STAR qualified for replacement of typical 60-Watt and lower incandescent bulbs and are being promoted through special pricing from the CT Energy Efficiency Fund.

Table 1 – Lighting Efficiency Standards for Incandescent Bulbs Timetable



In 2010, the transition period for the FCM ended, and the permanent FCM was put in place beginning June 1, 2010 by the ISO-NE. As New England's energy markets continue to develop and evolve, the Company continues to be an active participant in the development of the ISO-NE stakeholder process to refine the markets. The FCM allows market participants to bid their peak demand savings into the capacity market. Market participants earn capacity payments for qualifying resources, such as DG, energy efficiency, load management or load response. This was the first time in the United States that reduction in demand through energy efficiency and demand response programs was considered as electrical capacity equivalent to supply-side generation sources. Additional electrical capacity "produced" through the implementation of efficiency and load management measures becomes a resource, which can then be bid to ISO-NE on a level playing field with new generation. UI has entered peak demand savings from energy efficiency and load management projects into the transition period FCM on behalf of the Connecticut Energy Efficiency Fund and has successfully bid capacity in the first four capacity auctions. In addition, UI is an active demand response provider with over 70 MW of capacity currently enrolled.

The strategic focus of UI's programs is the result of a multi-level collaborative process involving UI and a diverse group of stakeholders. These stakeholders include: the DEEP, the

EEB, Connecticut state government, consumer and business interests, national and regional environmental and energy efficiency organizations, design professionals and energy services providers.

UI participates in national and regional activities to develop a long-range focus for energy efficiency. UI partners with the Consortium for Energy Efficiency ("CEE"), the American Council for an Energy-Efficient Economy ("ACEEE"), Northeast Energy Efficiency Partnerships ("NEEP"), and other utility and public benefit fund organizations. Together with these partners, UI is involved in regional or programmatic evaluations, market baseline research, development of efficiency standards, exchange of programmatic ideas and concepts, and the assessment of the need for incentives. These efforts have produced many of the energy efficiency concepts and measures upon which the programs are based.

Table 2 illustrates the incremental impact of C&LM programs to the sales forecast, and Table 3 shows the incremental annual impact of C&LM to the peak load forecast.

Table 2 – Incremental Annual Impact of C&LM to Sales Forecast

Year	Reduction in Energy Sales due to C&LM (GW-h)
2012	44.3
2013	42.4
2014	41.9
2015	40.8
2016	40.0
2017	38.8
2018	37.5
2019	34.2
2020	35.5
2021	35.7

Table 3 – Incremental Annual Impact of C&LM to Peak Load Forecast

Year	Reduction in System Peak Load Forecast due to C&LM (MW[4])
2012	5.7
2013	5.5
2014	5.4
2015	5.4
2016	5.3
2017	5.2
2018	5.1
2019	4.8
2020	5.0
2021	5.0

[4] Values represent estimated customer metered values. For UI's system load these reductions were 'grossed-up' using the system loss factor.

Section II. Transmission Planning

The UI projects included in this report help UI fulfill its obligation to provide reliable service to its customers and to meet the reliability standards mandated by national and regional authorities responsible for the reliability of the transmission system, i.e., the North American Electric Reliability Corporation ("NERC"), the Northeast Power Coordinating Council ("NPCC") and ISO-NE.

Transmission Planning – National and Regional Reliability Standards

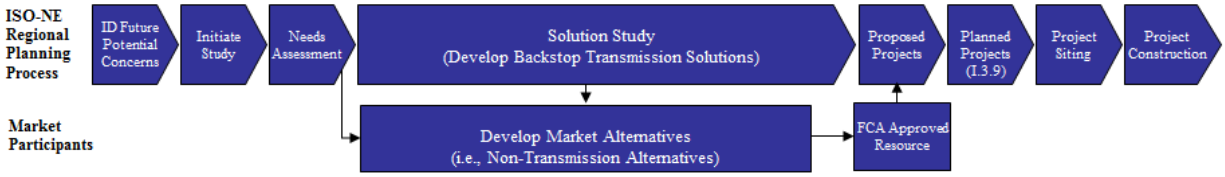
In 2006, the Federal Energy Regulatory Commission ("FERC") designated NERC as the nation's Electric Reliability Organization ("ERO"). FERC approved mandatory reliability standards developed by NERC in 2007. These mandatory reliability standards apply to UI as a transmission owner ("TO") and as a transmission planner ("TP") of the bulk power system, as designated by NERC through its compliance registry procedures. In addition to satisfying NERC reliability standards, UI must also satisfy NPCC and ISO-NE reliability standards. Both monetary and non-monetary penalties may be imposed for violations of the NERC, NPCC, and ISO-NE Reliability Standards.

Transmission Planning Process

ISO-NE, as the registered NERC reliability authority, along with UI and Connecticut Light & Power ("CL&P"), as the TOs in Connecticut, must comply with NERC and NPCC planning standards by performing reliability assessment studies of the transmission system. Needs Assessments in sub-areas such as Southwestern Connecticut ("SWCT") are performed to identify system needs over a ten year horizon. If a reliability problem is identified from a Needs

Assessment, ISO-NE, and the TO's develop transmission alternatives to ensure NERC, NPCC, and ISO-NE reliability standards are met. The developed transmission alternatives provided by the TO's and ISO-NE are considered the "backstop" solution to ensure future system reliability and compliance if market conditions do not change in the future. Viable transmission alternatives are compared for their construction feasibility, environmental impact, overall cost, longevity along with their operational and reliability performance and effectiveness. Following study completion, TO's recommend a preferred transmission solution to ISO-NE, the Planning Advisory Committee ("PAC"), and the New England Power Pool ("NEPOOL") Reliability Committee. The Needs Assessments, and Solution Studies and approval of preferred transmission solutions are the basis for ISO-NE's Regional System Plan ("RSP"). Figure 1 below depicts the ISO-NE Regional Planning process.

Figure 1



UI Proposed Transmission Projects

To address future reliability needs and consistent with the process described above, UI has multiple reliability projects at various stages in the process. UI's current transmission system projects are listed in Exhibit 3. These projects, as well as recently completed projects are outlined below.

To address reliability, substation capacity, voltage support, aging infrastructure, and fault duty limitation issues in the UI service territory, UI requested Declaratory Rulings from the

Council that no Certificates of Environmental Compatibility and Public Need are required for the following projects:

- East Shore 115-kV Capacitor Bank Transient Recovery Voltage ("TRV") Project – completed March 2011.
- Devon Tie Devon Tie 115-kV Switching Station Bulk Power System ("BPS") Compliance Project – completed November 2011.
- Union Avenue – Metro North 115/26.4-kV Substation Project– UI completed the 115-kV supply portion of the project in November 2011. Metro North is expected to complete the 26.4-kV substation portion of the project by December 2012.
- Grand Avenue 115-kV Switching Station Modernization Project – In 2009, the Council also issued a Declaratory Ruling regarding UI's proposed Grand Avenue 115-kV Switching Station Modernization Project, which addresses reliability compliance issues in the greater New Haven area. The project is expected to be in service by May 2012.
- East Shore 115/13.8-kV Substation Capacity Upgrade Project - In 2011, the Council issued a Declaratory Ruling for the project which is an upgrade to the existing 115/13.8-kV East Shore Substation needed to address distribution substation capacity and voltage related concerns in the greater New Haven area. UI anticipates completing this project in 2013.
- East Shore 115-kV Switching Station Modernization Project – the Council issued a Declaratory Ruling in 2010 for the project, which addresses aging infrastructure and short circuit issues at East Shore 115 kV Substation in New Haven. The project is expected to be in service by 2013.

- 8300 Line Reconfiguration Project – Also in 2011, UI made a filing to the CSC and received a Declaratory Ruling regarding the Grand Avenue 8300 115-kV Line Reconfiguration project, which addresses several transmission line thermal overloads in the greater New Haven area. The in service date of this project is expected to be mid-2013.

Other Identified Reliability Concerns

The Shelton Substation Project, a new 115/13.8-kV substation, is needed to address distribution reliability and capacity issues related to substation thermal overloads and voltage collapse concerns in the greater Shelton area. UI anticipates making a filing with the Council for this project in 2012, which is projected to be in service in 2014.

UI, along with ISO-NE and CL&P, completed a long term (2018) reliability Needs Assessment of the Southwest Connecticut (SWCT) area in 2011. PAC has been updated several times in 2010 and 2011 regarding the findings associated with this ISO-NE SWCT Needs Assessment. This assessment's objective is to evaluate the reliability performance of SWCT in meeting NERC, NPCC, ISO-NE, CL&P and UI standards and criteria. The study was conducted in accordance with the regional planning process as outlined in Attachment K of the ISO-NE Open Access Transmission Tariff ("OATT"). This study identified reliability transmission needs in the greater New Haven, greater Bridgeport, and Naugatuck Valley areas of UI's service territory related to capacity limitations, unacceptable voltage performance, and high short circuit current levels. Additional details of specific reliability concerns/needs are provided in the SWCT Needs Assessment report, dated July 13, 2011, which is posted on the ISO-NE website along with other 2011 PAC reports at:

http://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/index.html

An active second study, the ISO-NE SWCT Area Transmission Solution Study, commenced in 2011 to develop and analyze transmission solutions to address the needs identified in the 2011 SWCT Needs Assessment. UI anticipates additional filings to CSC in 2012 and 2013 based on the preferred solutions/projects resulting from this study

Prior SWCT related projects contemplated by UI, namely the Naugatuck Valley 115-kV Reliability Improvement Project and the Pequonnock 115-kV Fault Duty Mitigation Project, remain listed in Exhibit 3, "Transmission System Planned Modifications," and will be updated in subsequent filings based on the results of the ISO-NE SWCT Area Transmission Solution Study.

Please note that Exhibit 3 includes only those planned transmission projects that UI is responsible to undertake. It does not include any plans or proposed actions by third parties that would require transmission system modifications in UI's service territory. It would be the responsibility of such third parties to provide the CSC with a report of their plans as appropriate. Any such proposed modifications would require notification and coordination with UI so the Company can assess the impacts on its transmission system and ensure the system's continued reliability.

Connecticut-Wide and Region-Wide Transmission Issues

On January 17, 2012, DEEP published the Draft 2012 Integrated Resource Plan ("IRP") for Connecticut. Appendix G of the 2012 IRP addresses needs and studies in Connecticut such as the SWCT Solution Study, the Greater Hartford Central Connecticut Needs Assessment and discusses the consideration of Non-Transmission Alternatives ("NTA"). The 2012 IRP indicates that Connecticut intends to "engage in the creation of a region-wide NTA process." The 2012 IRP suggests Connecticut will support the development of the recently announced conceptual

ISO-NE NTA process. This process is part of ISO-NE's Strategic Planning Process, which is described in an ISO-NE October 27, 2011 whitepaper.

The following are New England region-wide risks identified by ISO-NE and various stakeholders in 2010 and 2011:

- Resource performance and flexibility.
- Increased reliance on natural gas generation.
- Potential retirement of generation.
- Integration of greater levels of variable intermittent resources (i.e. wind).
- Alignment of markets with Transmission Planning.

In a presentation given at the NEPOOL Participants Committee on February 10, 2012, ISO-NE revealed its business priorities for 2012 and included a presentation on the "strategic initiatives" which outlined work to date and planned work for 2012 related to the topics listed above.

Public Policy Issues

As part of the region's efforts to comply with FERC Order 1000 on, "Transmission Planning and Cost Allocation," the New England States Committee on Electricity ("NESCOE") put forth their "New England States' Preferred Framework – Order 1000 Public Policy Projects for Discussion." The document is available via the following link: http://www.nescoe.com/uploads/Order_1000_Framework_Jan_12_2012.pdf

NESCOE proposes that ISO-NE allocate to NESCOE not less than one "Public Policy Study" not less than once every two years to enable analysis of the potential implications and regulation requirements and/or public policy targets that states collectively identify. NESCOE shall make the determination of which transmission needs driven by public policy requests ISO-

NE will analyze. Upon completion of the study, NESCOE may direct ISO-NE to perform more detailed transmission studies.

The proposal goes on to outline treatment of projects with multiple benefits (i.e.: reliability, market efficiencies, public policy), controls, commitments, approvals, inclusion in the RSP and cost recovery.

Section III EXHIBITS

EXHIBIT 1 System Energy Requirements, Annual Sales, and Peak Load Table

The United Illuminating Company

System Energy Requirements, Annual Sales, and Peak Load

History									Normal Weather Adjustment					Extreme Weather Adjustment		
Year	Total Sys. Req. (GWh)	Annual Change (Pct.)	Actual Sales (GWh)	Annual Change (Pct.)	Actual System Peak (MW)	Annual Change	Load Factor (Pct.)		Weather Adjusted Sales (GWh)	Annual Change (Pct.)	Weather Adjusted System Peak (MW)	Annual Change	Load Factor (Pct.)	Weather Adjusted System Peak (MW)	Annual Change	Load Factor (Pct.)
2001	6,010	-	5,724	-	1,324	-	52%		5,689	-	1,259	-	55%	1,322	-	52%
2002	6,051	0.7%	5,781	1.0%	1,310	-1.1%	53%		5,684	-0.1%	1,259	0.0%	55%	1,318	-0.2%	52%
2003	6,071	0.3%	5,763	-0.3%	1,281	-2.2%	54%		5,716	0.6%	1,285	2.0%	54%	1,351	2.5%	51%
2004	6,205	2.2%	5,952	3.3%	1,201	-6.3%	59%		5,952	4.1%	1,300	1.2%	54%	1,364	0.9%	52%
2005	6,360	2.5%	6,106	2.6%	1,346	12.1%	54%		5,995	0.7%	1,353	4.0%	54%	1,428	4.7%	51%
2006	6,149	-3.3%	5,919	-3.1%	1,456	8.2%	48%		5,979	-0.3%	1,377	1.8%	51%	1,456	2.0%	48%
2007	6,119	-0.5%	5,917	0.0%	1,298	-10.9%	54%		5,929	-0.8%	1,389	0.8%	50%	1,464	0.6%	48%
2008	5,912	-3.4%	5,729	-3.2%	1,301	0.3%	52%		5,709	-3.7%	1,379	-0.7%	49%	1,467	0.2%	46%
2009	5,673	-4.0%	5,493	-4.1%	1,253	-3.7%	52%		5,593	-2.0%	1,280	-7.2%	51%	1,395	-4.9%	46%
2010	5,950	4.9%	5,735	4.4%	1,365	8.9%	50%		5,587	-0.1%	1,252	-2.2%	54%	1,366	-2.1%	50%
2011	5,783	-2.8%	5,576	-2.8%	1,401	2.6%	47%		5,485	-1.8%	1,272	1.6%	52%	1,386	1.5%	48%
2001 - 2011 growth		-3.8%		-2.6%		5.8%				-3.6%		1.1%			4.9%	
2002 - 2011 growth		-4.4%		-3.5%		7.0%				-3.5%		1.0%			5.1%	

Forecast					Normal Weather Scenario					Extreme Weather Scenario		
Year	Total Sys. Req. (GWh)	Annual Change (Pct.)			Weather Adjusted Sales (GWh)	Annual Change (Pct.)	System Peak (MW)	Annual Change	Load Factor (Pct.)	System Peak (MW)	Annual Change	Load Factor (Pct.)
2012	5,779	-0.1%			5,498	0.2%	1,278	0.5%	52%	1,379	-0.5%	48%
2013	5,785	0.1%			5,505	0.1%	1,318	3.1%	50%	1,421	3.0%	46%
2014	5,830	0.8%			5,547	0.8%	1,347	2.2%	49%	1,460	2.7%	46%
2015	5,875	0.8%			5,590	0.8%	1,370	1.7%	49%	1,492	2.2%	45%
2016	5,938	1.1%			5,650	1.1%	1,384	1.0%	49%	1,514	1.5%	45%
2017	5,967	0.5%			5,678	0.5%	1,385	0.1%	49%	1,523	0.6%	45%
2018	6,014	0.8%			5,722	0.8%	1,386	0.0%	50%	1,532	0.6%	45%
2019	6,059	0.8%			5,765	0.8%	1,388	0.1%	50%	1,542	0.7%	45%
2020	6,123	1.0%			5,826	1.0%	1,392	0.3%	50%	1,555	0.9%	45%
2021	6,152	0.5%			5,854	0.5%	1,397	0.4%	50%	1,570	1.0%	45%
2011 - 2021 growth		6.4%				6.7%		9.9%			13.3%	

1. System Requirements are sales plus losses and Company use.
2. Load Factor = System Requirements (MWh) / (8760 Hours X System Peak (MW)).
3. All forecasts include C&LM, DG & potential new large customer planned loads identified by UI Economic Development.

EXHIBIT 2 Peak Load Scenario for ISO-NE Regional Planning Process

The United Illuminating Company

Peak Load Scenario Comparable to ISO-NE's CELT Forecast Assumptions (Final forecasts to be provided to ISO-NE)

Forecast

	Normal Weather Scenario		Extreme Weather Scenario	
Year	System Peak (MW)	Annual Change	System Peak (MW)	Annual Change
2012	1,272	0.0%	1,373	-1.0%
2013	1,296	1.9%	1,399	1.9%
2014	1,325	2.2%	1,437	2.7%
2015	1,348	1.8%	1,470	2.3%
2016	1,363	1.1%	1,493	1.6%
2017	1,370	0.5%	1,508	1.0%
2018	1,375	0.4%	1,521	0.9%
2019	1,382	0.5%	1,537	1.0%
2020	1,392	0.7%	1,555	1.2%
2021	1,403	0.8%	1,575	1.3%
2011 - 2021 growth		10.3%		13.6%

1. All forecasts exclude C&LM, DG & potential new large customer planned loads identified by UI's Economic Development Department, consistent with ISO-NE CELT load forecasting methodology.

EXHIBIT 3 Transmission System Planned Modifications

Report to the Connecticut Siting Council

List of Planned Transmission Projects for which Certificate Applications are being contemplated, may be subject to Declaratory Ruling, or have already been filed

Projects for which Certificate Applications are being Contemplated	kV	Date of Completion
1. Installation of a new 115/13.8-kV substation in Shelton	115	2014
2. Naugatuck Valley 115-kV Reliability Improvement Project	115	2014
3. Pequonnock 115-kV Fault Duty Mitigation Project	115	2015

Projects which have Received CSC Declaratory Ruling Approval		
1. Grand Avenue 115-kV Switching Station Modernization Project	115	2012
2. East Shore 115/13.8-kV Substation Capacity Upgrade Project	115	2013
3. East Shore 115-kV Switching Station Modernization Project	115	2013
4. 8300 115-kV Line Reconfiguration Project	115	2013

APPENDIX J

ELECTRIC AND NATURAL GAS UTILITY COMPANIES, *2012 ELECTRIC AND NATURAL GAS CONSERVATION AND LOAD MANAGEMENT PLAN*

2012 Electric and Natural Gas Conservation and Load Management Plan

Submitted by:

The Connecticut Light and Power Company
The United Illuminating Company
Yankee Gas Services Company
Connecticut Natural Gas Corporation and
Southern Connecticut Gas Company

Docket No. 11-10-03

September 30, 2011

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CHAPTER ONE: OVERVIEW (Electric and Natural Gas)

Introduction

In accordance with Connecticut General Statutes § 16-245m and § 16-32f, The Connecticut Light and Power Company ("CL&P"), The United Illuminating Company ("UI") (collectively, the "Electric Companies") and The Connecticut Natural Gas Corporation ("CNG"), The Southern Connecticut Gas Company ("SCG"), and Yankee Gas Services Company ("Yankee Gas") (collectively the "Natural Gas Companies") hereby submit this comprehensive Conservation & Load Management ("C&LM") Plan ("2012 C&LM Plan") for the implementation of cost-effective electric and natural gas energy efficiency programs and market transformation initiatives for the years 2012 and 2013.

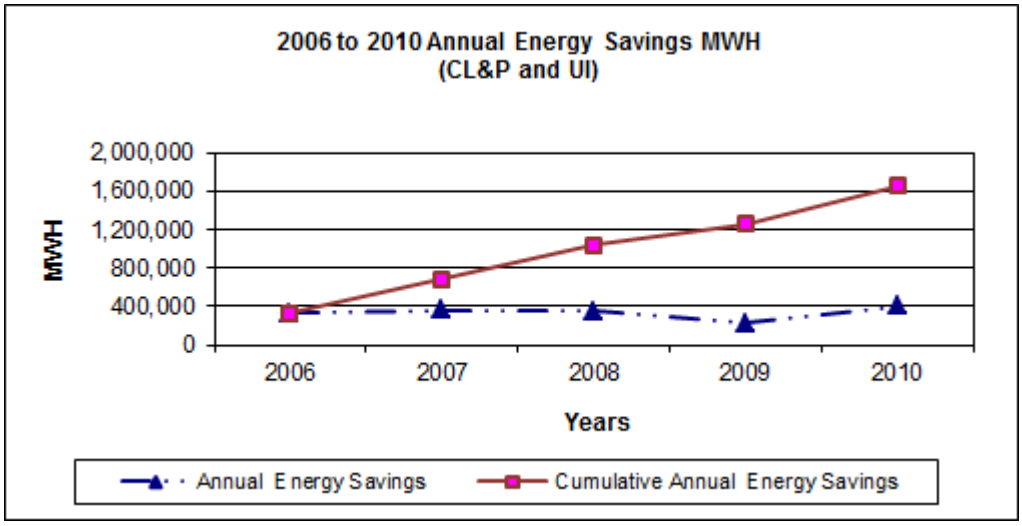
The 2012 C&LM Plan represents a continuation of combining the C&LM plans for both the Electric Companies and Natural Gas Companies. The Electric Companies are also continuing to present a two-year budget cycle that will allow for program continuity over a multiple budget year period. This two year budget cycle will also provide latitude for adjustments due to over or under-spending of program budgets and thus minimize disruptive program actions that adversely impact customer and vendor participation. The Electric and Natural Gas Companies will continue to monitor overall market response and program effectiveness and will maintain the flexibility to reallocate unspent program dollars within program sectors to in-demand programs. This flexibility will allow the Electric and Natural Gas Companies to react to market conditions, enhance their capacity to achieve cost-effective savings and will minimize undue interruptions in program offerings in the marketplace.

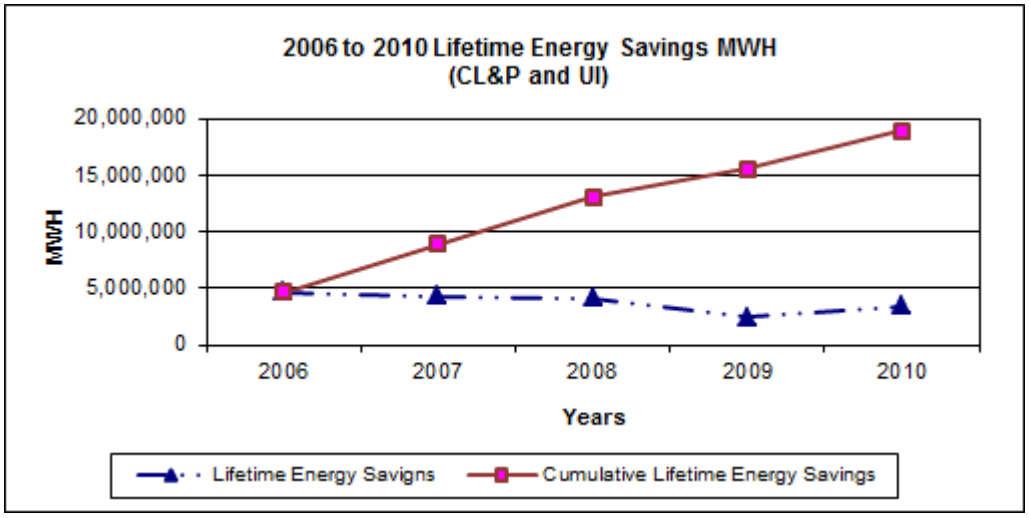
This is the thirteenth C&LM Plan prepared by the Electric Companies since passage of the State's restructuring legislation (Public Act 98-28) and the seventh plan filed by the Natural Gas Companies since passage of the State's energy independence legislation (Public Act 05-01). In conjunction with the Energy Efficiency Board ("EEB") (formerly the Energy Conservation Management Board) and the EEB consultants, the Companies have developed and deployed cost-effective, integrated electric and gas efficiency and conservation programs to all classes of energy consumers throughout the state.

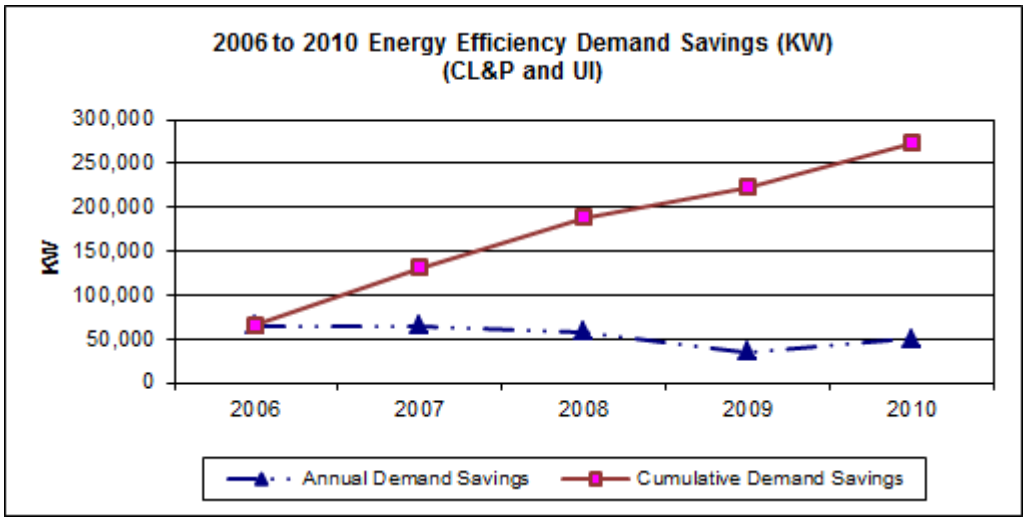
Chapters 1-7 of this Plan reflect goals, strategies and tactics for program design and delivery based on a budget that relies on current funding mechanisms. Chapter 8 (Increased Savings Scenario) reflects an expanded goal and commensurate budget scenario that is in keeping with the new state emphasis on energy leadership.

Historical Highlights

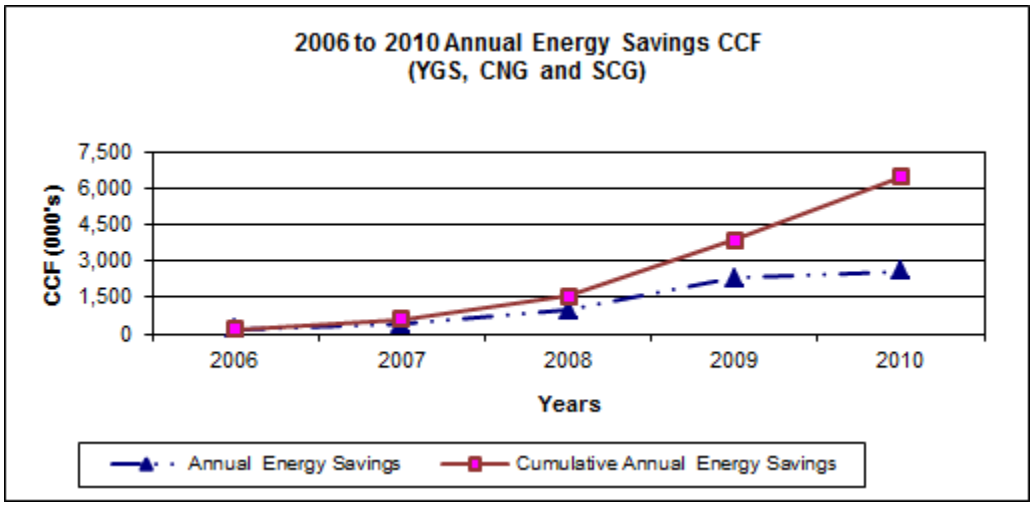
Historical spending and savings achievements, as well as customer participation associated with the implemented C&LM Plans from 2006 to 2010 are highlighted in the following tables.

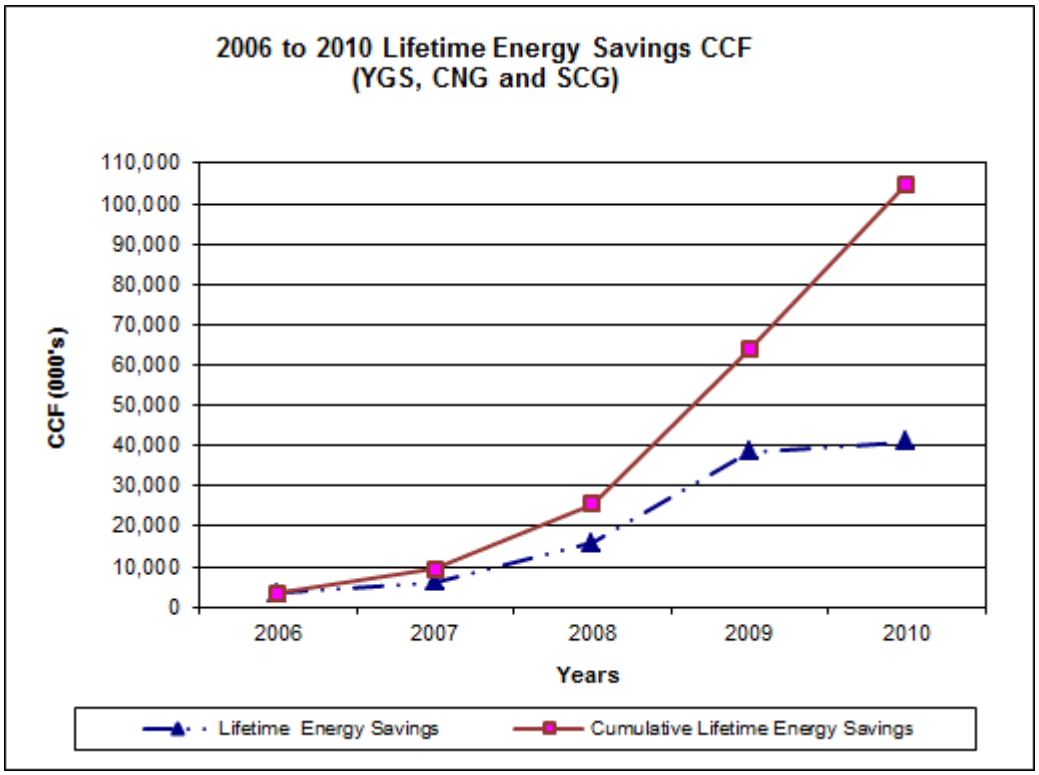




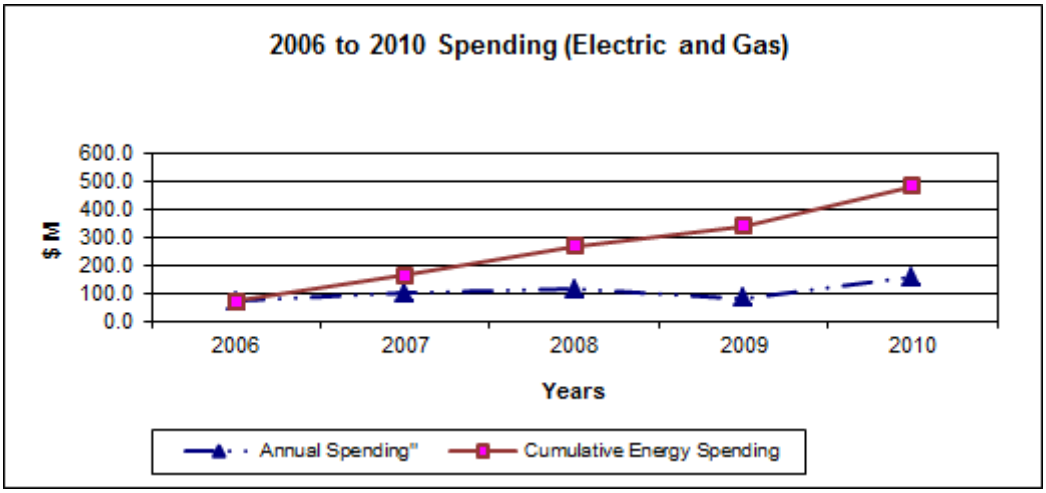


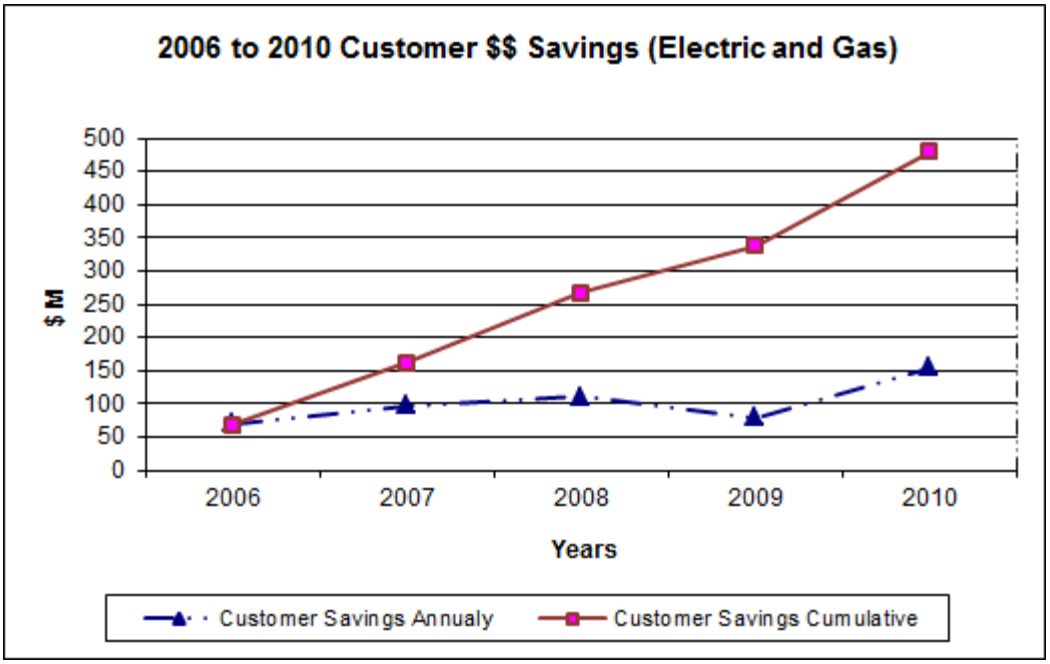
Historical Highlights (Continued)





Historical Highlights (Continued)





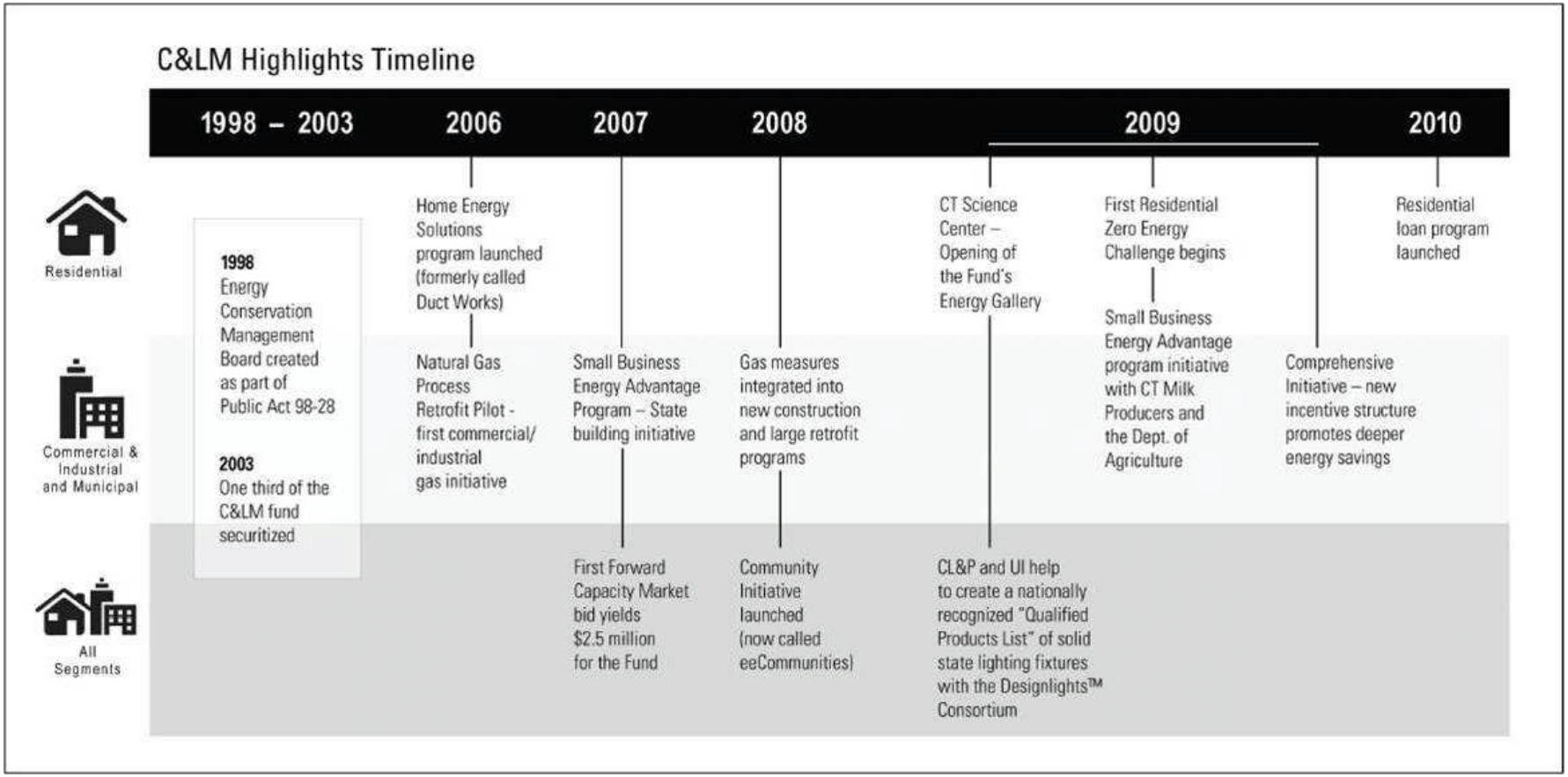
Historical Highlights (Continued)

Combined Electric Companies - Customer Program Participation

	2006	2007	2008	2009	2010	Totals
Number of Home Energy Solutions Participants	13,827	9,190	13,825	16,046	29,642	82,530
Quantity of Retail Products	2,448,747	3,141,316	3,030,371	2,209,659	5,177,508	16,007,601
Number of Home Energy Solutions-Income Eligible Participants	16,597	14,904	11,213	15,132	15,347	73,193
Number of Large Commercial & Industrial Participants (including municipal)	1,668	1,652	1,707	1,601	1,841	8,469
Number of Small Businesses Energy Advantage Participants	1,265	1,754	1,628	1,344	2,021	8,012

Reduction in Pollutants and Carbon Dioxide (in Tons)

	2006	2007	2008	2009	2010	Totals
SO_2	101	336	100	68	326	931
Nox	50	104	55	34	112	354
CO_2	197,397	214,927	193,166	134,539	207,561	947,591


C&LM Highlights Timeline
1998 – 2003
2006
2007
2008
2009
2010
Residential
Commercial & Industrial and Municipal
All Segments
1998
Energy Conservation Management Board created as part of Public Act 98-28
2003
One third of the C&LM fund securitized
Home Energy Solutions program launched (formerly called Duct Works)
Natural Gas Process Retrofit Pilot - first commercial/ industrial gas initiative
Small Business Energy Advantage Program – State building initiative
First Forward Capacity Market bid yields $2.5 million for the Fund
Gas measures integrated into new construction and large retrofit programs
Community Initiative launched (now called eeCommunities)
CT Science Center – Opening of the Fund's Energy Gallery
CL&P and UI help to create a nationally recognized "Qualified Products List" of solid state lighting fixtures with the Designlights™ Consortium
First Residential Zero Energy Challenge begins
Small Business Energy Advantage program initiative with CT Milk Producers and the Dept. of Agriculture
Comprehensive Initiative – new incentive structure promotes deeper energy savings
Residential loan program launched

2012 Priorities

As Connecticut labors to redefine its economic future, energy conservation and load management planning is more critical than ever. In 2007, Public Act 07-242, *An Act Concerning Electricity and Energy*, envisioned energy efficiency as the centerpiece of a statewide energy policy and directed the State to implement "all cost-effective energy efficiency." That directive, and our commitment to it, has not changed. What has changed is the way we are meeting that commitment. The programs and initiatives detailed in this 2012 C&LM Plan build on the strengths of the past, but take advantage of new technologies, rely more heavily on relationships with communities (including the financial community), and acknowledge that the energy efficiency and conservation market is growing with more stakeholders, and, consequently, more at stake. More recently, Connecticut's landmark energy reform bill, PA 11-80, makes significant changes to Connecticut's energy conservation policy and structure, representing a fundamentally new approach to achieving energy efficiency which is addressed in more detail later in this chapter.

The following is a list of the key priorities for 2012, as reflected in this Plan.

Market Transformation

The long-term market transformation strategy for the Energy Efficiency Fund's programs is to achieve fundamental market change in energy management and investment practices for residential, commercial, industrial and institutional markets, resulting in sustainable, continuously improving and highly cost-effective savings. Over the years, the Electric and Natural Gas Companies have worked closely with the EEB to successfully influence and effect change in building design, renovations, maintenance practices and equipment performance. Often these improvements come through changes to the State Building Code, or as a result of collaboration with trade and business associations.

The shift in the market towards more energy-efficient technologies and practices are accompanied by a shift towards more consumer investment in the benefits. In other words, market transformation should lead to more market-based implementation of energy efficiency services and products. Increasingly, the business community is embracing energy efficiency and strategic energy management as a standard business practice, and, in the residential sector, as a necessity. An objective of the C&LM programs is to help facilitate that shift. Efforts in 2012 will include an increased emphasis on programs and initiatives that promote sustainable energy management as a core consumer and business value. Ultimately, as the green market grows, programs should move from a primary dependency on public benefit charges to a more self-sustaining industry that can be supplemented, or leveraged, though Energy Efficiency Fund resources.

Comprehensive (Deep) Energy Savings

The 2012 C&LM Plan will continue to offer program designs, education and promotion that encourage comprehensive (deep) energy savings in homes, non-residential buildings and industrial processes through an up front, packaged, comprehensive approach. The intent is to shift from projects where only the "low-hanging-fruit" is addressed, necessitating repeat visits later on to evaluate the deeper, more expensive energy reduction projects like mechanical system and energy management system controls. A comprehensive approach minimizes the administrative costs associated with multiple visits and enables the customer to start benefiting from maximum savings sooner.

Innovative Financing

Customer financing has proven to be a key driver of energy investment in general and comprehensive project participation in particular. On June 1, 2011 the Companies introduced a new residential loan program by offering subsidized, low interest rate loans to residential customers who make qualified energy efficiency improvements to their homes. This program is one of the first in the nation to offer residential electric customers on-bill repayment for energy efficiency loans.

The 2012 C&LM Plan includes a continued emphasis on residential financing and the introduction of natural gas energy efficiency financing for small business customers. (Refer to Chapter 5 for details.)

Expanded Analytic Tools

In 2012, there will be a stronger emphasis on the additional use of customer analytic, benchmarking, and portfolio rating tools for use in residential, commercial/industrial, and municipal applications. (See Chapters 2 and 3 for details.)

Performance Contracting

In 2011 the Companies and the EEB started looking for ways to facilitate performance contracting in Connecticut as a strategy to leverage existing funds. Performance contracting continues to be a priority in 2012. (Refer to Chapter 3 Overview for details.)

Education and Outreach

Market transformation is impossible without an informed consumer. In 2012, the C&LM administrators will increase emphasis on the Clean Energy Communities program initiatives to leverage high-visibility opportunities and effect change on a broader scale, support continued collaboration with public and technical schools and universities and increase outreach to the contractor community.

2012 Focus Areas

In support of the priorities listed above, the Electric and Natural Gas Companies and the EEB and their consultants will focus on the following areas:

Residential Focus Areas:

- Support and participate in legislative and regulatory activities that promote updated energy codes and appliance standards, code enforcement training and support, and building labeling.
- Deeper savings and increased data gathering/analysis in HES in order to provide more comprehensive installations and accurate follow-up recommendations from the initial visit.
- Increased media attention on new federal lamp standards and Federal Trade Commission ("FTC") lamp labeling requirements has led to significant consumer interest (and confusion) regarding light bulbs. Additionally, interest in LED lighting has increased and the Energy Efficiency Fund has incentives on several ENERGY STAR qualified LED products. In 2012, we will focus on consumer education and begin the transition from CFLs to LED lighting in the Retail Products, Home Energy Solutions and Residential New Construction programs.
- Continued support of new technologies and energy efficient strategic approaches such as advanced design and construction of new buildings, inverter driven ductless heat pumps, tankless whole house gas water heaters, and heat pump water heaters in appropriate applications.

Commercial & Industrial Focus Areas:

- Increased emphasis on strategic energy management – integrating technology, benchmarking, and training and behavior elements into all commercial and industrial program offerings.
- Green State Building Initiative – enhancements to commercial and industrial programs that will assist the State in meeting and exceeding PA 11-80 goals in Section 118.
- Continue the investigation and analysis of non-energy benefits ("NEBs") of high performance buildings and processes to broaden the business case for energy efficiency. Other states like Massachusetts have been incorporating NEBs into their program evaluation and have already been reporting on this topic for a number of years.
- Increased promotion of natural gas technology and the addition of gas measures to the Small Business Energy Advantage program.

Current Funding Sources

The primary funding sources for the 2012 C&LM Plan continue to be the three-mill charge on customers' electric bills and the contributions from natural gas customers (on firm rates) through the monthly Conservation Adjustment Mechanism ("CAM").

Additional revenue from natural gas customers may also be available as a result of excess gross receipts tax ("GRT") collections.[1]

The energy and demand savings that result from the programs outlined in the 2012 C&LM Plan are, to a substantial extent, generators of additional revenue. Energy savings allow us to participate and earn funding from a variety of sources. The 2012 C&LM Plan includes funding from the Regional Greenhouse Gas Initiative ("RGGI"), Class III Renewable Energy Credits ("Class III RECs") and Independent System Operator-New England's ("ISO-NE") Forward Capacity Market ("FCM"). In other words, the more these energy efficiency programs save, the more financially sustainable they can become.

CL&P/UI C&LM REVENUES ($M)	2012 CL&P/UI Total	2012 CL&P/UI Percent
Collections (Mill Rate)	$ 83.9	79%
ISO-NE Other Demand Resources (ODRs)	$ 8.1	8%
ISO-NE Forward Capacity Market Demand Response Revenues	$ 4.9	5%
Class III Renewable Energy Credits	$ 4.5	4%
Carrying Charges	$ 0.8	1%
RGGI	$ 3.4	3%
Total - C&LM Revenues	**$ 105.6**	**100%**

Forward Capacity Market (FCM)

Through the FCM, a reduction in usage from demand side resources such as energy efficiency and demand response programs is considered as electrical capacity equivalent to supply-side generation sources, which can then be bid into the ISO-NE capacity market similar to conventional generation. With the transition period of the FCM now well behind us, we enter into the second full year of the permanent FCM market.

[1] (Conn. Gen. Stat. § 16-32f(b) (2008 Supp.)). The potential amount of excess GRT funding available to support the 2012 C&LM Plan is unknown at this time since the annual excess GRT is not calculated until the end of the State's fiscal year, June 30, 2012. In the event funding from excess GRT becomes available, the Natural Gas Companies have developed a procedure with the EEB, per the Department's Order No. 4 in Docket 06-10-03, *DPUC Review of the Connecticut Gas Utilities Forecast of Demand and Supply 2007-2011 and Joint Conservation Plans*, Decision (Jan. 23, 2008), to receive such funds from the State Comptroller's Office. Funds will then be allocated to support energy efficiency programs as described in this 2012 C&LM Plan as an offset to the CAM.

Payments received by the Electric Companies from the FCM have already contributed more than $37.1 million (CL&P, $29.4 million; UI, $7.7 million) in revenue to the Energy Efficiency Fund. However, this revenue is becoming less robust. The FCM is a forward-looking, competitive market and auctions have already been held for 2012, 2013, and 2014. As a result of this competitive auction process, the price of capacity has been driven down and in 2012 customers can expect to receive approximately $35 per kW per year. For the foreseeable future, FCM revenues are not likely to be the most significant funding source for the Connecticut Energy Efficiency Fund. However, the Federal Energy Regulatory Commission ("FERC") is currently deliberating on a package of changes to FCM rules that could potentially lead to higher capacity prices in the future.

Class III Renewable Energy Credits ("RECs")

Class III Renewable Energy Credits are earned via commercial and industrial megawatt hour savings from Energy Efficiency Fund-supported projects. These Class III RECs are sold via a Request for Proposal ("RFP") process to energy suppliers or marketers interested in meeting their renewable portfolio standard obligations. Revenue from Class III RECs in 2012 is expected to be approximately $4.5 million.

Regional Greenhouse Gas Initiative ("RGGI")

RGGI is the first mandatory, market-based effort in the United States to reduce greenhouse gas emissions. By 2018, Connecticut and ten Northeastern and Mid-Atlantic States will cap and reduce carbon dioxide ("CO_2") emissions from the power sector by ten (10) percent. The participating states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. There has been recent political activity in New Jersey and New Hampshire aimed at removing those states from RGGI, however, at this time, they remain in. The participating RGGI states sell emission allowances through auctions and invest the auction proceeds to Public Benefits Charge programs that fund energy efficiency, renewable energy and other clean energy programs and technologies.

Under the Department of Environmental Protection regulations (Section 22a-174-31), a minimum of seventy-seven (77) percent must be allocated to the Connecticut Auction Account. Of that the amount allocated to the Connecticut Auction Account, seventy-five (75) percent will be distributed to the CL&P account, eighteen and three-fourths (18.75) percent to the UI account, and six and one-fourth (6.25) percent to the Connecticut Municipal Electric Energy Cooperative ("CMEEC"). These proceeds must be used to support the development of energy efficiency measures.

The following chart depicts the results of the RGGI auctions to date. The trend established in three of the last four auctions have indicated that not all allowances are being sold, which means that the proceeds from RGGI are lower than they have been in the past. Some analysts speculate that emitters are pulling back from banking RGGI credits for future compliance, and that has led to the recent auction

being undersubscribed. It is uncertain at this time if this trend will continue, but this pattern has led to a revenue decrease.

Summary of RGGI Auctions to Date					
Auction Number	**Control Period**	**Quantity Offered**	**Quantity Sold**	**Clearing Price**	**Total Proceeds**
Auction 12 6/8/2011	Current	42,034,184	12,537,000	$1.89	$25,477,200.00
	Future	1,864,952	943,000	$1.89	
Auction 11 3/9/2011	Current	41,995,813	41,995,813	$1.89	$83,425,588.47
	Future	2,144,710	2,144,710	$1.89	
Auction 10 12/1/2010	Current	43,173,648	24,755,000	$1.86	$48,224,220.00
	Future	2,137,991	1,172,000	$1.86	
Auction 9 9/10/2010	Current	45,595,968	34,407,000	$1.86	$66,437,340.00
	Future	2,137,992	1,312,000	$1.86	
Auction 8 6/9/2010	Current	40,685,585	40,685,585	$1.88	$80,465,566.78
	Future	2,137,993	2,137,993	$1.86	
Auction 7 3/10/2010	Current	40,612,408	40,612,408	$2.07	$87,956,944.56
	Future	2,137,992	2,091,000	$1.86	
Auction 6 12/2/2009	Current	28,591,698	28,591,698	$2.05	$61,587,120.90
	Future	2,172,540	1,599,000	$1.86	
Auction 5 9/9/2009	Current	28,408,945	28,408,945	$2.19	$66,278,239.35
	Future	2,172,540	2,172,540	$1.87	
Auction 4 6/17/2009	Current	30,887,620	30,887,620	$3.23	$104,242,445.00
	Future	2,172,540	2,172,540	$2.06	
Auction 3 3/18/2009	Current	31,513,765	31,513,765	$3.51	$117,248,629.80
	Future	2,175,513	2,175,513	$3.05	
Auction 2 12/17/2008	Current	31,505,898	31,505,898	$3.38	$106,489,935.24
Auction 1 9/25/2008	Current	12,565,387	12,565,387	$3.07	$38,575,738.09

Connecticut Efficient Healthy Homes Initiative ("CTEHHI")

In September 2010, The Companies, on behalf of the Energy Efficiency Fund, applied for and were awarded a two-year $3 million Weatherization Innovation Pilot Program ("WIPP") grant from the U.S. Department of Energy ("DOE") to create a streamlined approach to providing energy efficient and healthy housing interventions for Connecticut's income-eligible residents. CTEHHI was one of sixteen WIPP grantees chosen out of 71 national applications. CTEHHI is a statewide program, providing additional energy efficiency and health and safety services to customers with the greatest need, with a gross annual income at or below sixty (60) percent of state median income.

CTEHHI is based on community partnerships. Statewide CTEHHI partners include Bridgeport Neighborhood Trust, the City of New Haven, the City of Bridgeport, Connecticut Children's Medical Center/LAMPP, Connecticut Department of Public Health, Connecticut Housing Finance Authority, L. Wagner & Associates, NauVEL, NeighborWorks New Horizons, and Yale-New Haven Children's Hospital Regional Lead Treatment Center. Through CTEHHI, Connecticut is participating in a national movement to make housing healthy, safe, and environmentally sustainable, a movement supported by the U.S. Centers for Disease Control and Prevention, U.S. Department of Agriculture, U.S. Department of Energy, U.S. Department of Housing and Urban Development's Office of Healthy Homes and Lead Hazard Control, and the U.S. Environmental Protection Agency.

It is also important to note that in recent years the Companies have expanded their roles as grant proposal writers. The DOE CTEHHI grant is the most recent successful effort, but other proposals are in development as well. The *I6 Green Challenge Grant Proposal* filed in partnership with UCONN for the Connecticut Proof of Concept Center, will focus exclusively on green technologies. The most recent grant application, *The Connecticut Efficient Buildings Report Card***,** was filed in partnership with DEEP. This DOE grant focuses on developing the marketplace, infrastructure and mechanisms that are needed to attract private capital investment into commercial building energy efficiency and conservation retrofits.

Future and Potential Funding Sources and Challenges

Fuel Oil Funding

In a State where more than half, or approximately 700,000 households heat with fuel oil or propane, providing equitable energy-efficiency services to residential consumers under the current funding mechanisms remains a challenge. While fuel oil and propane-heating customers do pay into the Fund through their electric utility bill, they do so to a significantly lesser degree than do electric or natural gas-heating customers.

In 2010 and 2011, the Companies utilized temporary methods to meet the challenge through collaboration with the Office of Policy & Management ("OPM"), American Recovery and Reinvestment Act ("ARRA") monies and RGGI revenues. These non-traditional solutions allowed residential

customers to participate in core weatherization and energy efficiency services at the same low co-pay as electric and gas-heating customers, or at no charge if they meet income eligibility guidelines. These funding methods are not long-term solutions and by late 2011/early 2012 will be exhausted.

Under Public Act 11-80[2] a statewide limit of $500,000 from the 3-mill base Energy Efficiency Fund budget can be used to support fuel oil heating energy efficiency measures. Yet the bill requires that each electric, gas or fuel oil customer, regardless of heating source, be assessed the same co-payment for the Home Energy Solutions program. Under this restriction, only 1,600 fuel oil and propane-heating households can be served, leaving hundreds of thousands of oil and propane customers out in the cold.

Electric Conservation Adjustment Mechanism ("CAM")

While the Conservation Adjustment Mechanism or CAM is currently only used to help fund natural gas energy efficiency programs, statutes are in place that would allow the Electric Companies to implement the CAM for electric programs as well. This could result in a significant resource to support increased energy efficiency programming, attractive rate financing and savings. Prior to the application of the mill rate in 1998, conservation was funded though the Conservation Adjustment Mechanism (CAM). This process could be reinstated to serve as an additional source of program funding for energy efficiency.

Decoupling

Decoupling exists in Connecticut; however UI has limited decoupling and CL&P's decoupling plan was not approved in its last rate case. An appropriate application of decoupling in Connecticut will allow program funding for energy efficiency as well as allow the utilities to recover lost revenues from conservation efforts.

Integrated Resource Plan

As noted earlier, Public Act 07-242 called for any future energy resource needs to be first met by implementation of all cost-effective energy efficiency. PA 07-242 also charged the Electric Companies with developing an integrated resource plan ("IRP").

Now, as part of Public Act 11-80, the responsibility for developing the IRP has shifted from the Companies to the newly created Department of Energy and Environmental Protection ("DEEP"). Despite this shift in responsibility, the requirement to implement all cost-effective energy efficiency as a first resource remains in effect.

The 2010 IRP consisted of two incremental investment strategies. The first strategy was called *Targeted Demand Side Management* ("DSM") and it consisted of enough energy efficiency investment

[2] An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future

to eliminate load growth over the planning horizon. The second strategy was called *All-Achievable Cost-Effective DSM*. In summary, funding the Targeted DSM expansion strategy would have required an additional outlay of approximately $19 million per year (2010 dollars) and the All Cost-Effective DSM strategy would have required approximately an additional $65 million per year.

The Companies expect that incremental investments in energy efficiency will continue to be an important part of future IRPs to meet the requirements embodied in the statute. We are working closely with the staff at DEEP to provide the necessary information to insure that energy efficiency investments are recognized as a core part of Connecticut's energy strategy.

PA 11-80 and the Connecticut Energy Efficiency Fund

Connecticut's landmark energy reform bill, PA 11-80, makes significant changes to Connecticut's energy conservation policy and structure, representing a fundamentally new approach to achieving energy efficiency. Energy efficiency is now a national policy priority and Connecticut's new administration has positioned the State to take a leadership role. PA 11-80 allows our State to align its energy efficiency goals with national goals and objectives and work towards positioning Connecticut as a leader in the nation for energy efficiency[3].

Many of the Act's specific provisions are in alignment with the mission and goals of the Connecticut Energy Efficiency Fund and are addressed through the programs detailed in this C&LM 2012 Plan.

Specifically, the Act addresses leveraging existing funds to provide low-cost energy efficiency financing and the utilization of savings based, performance contracting initiatives. As noted earlier, both financing and performance contracting are action items in the C&LM 2012 Plan and are detailed in subsequent chapters.

The Act also calls for reducing energy use in state buildings by ten (10) percent by 2012. This has been a long-term goal of the Companies and we fully support the new administration's efforts to make this a priority. In fact, during the last four years, the Energy Efficiency Fund-supported Retro Commissioning program has been actively involved with the State university system. Retro Commissioning projects have been completed at ECSU, CCSU, UCONN Waterbury and UCONN Stamford. Current projects at UCONN's Storrs campus are estimated to save approximately six (6) to eight (8) percent annually in electricity consumption. The comprehensive nature of the Retro Commissioning program also captures gas heating savings and other ancillary savings, like water and fuel oil. The State university projects are just an example of the how the Energy Efficiency Fund is supporting energy reduction in State buildings. Another notable project was the work done at approximately 40 state facilities through a partnership with Connecticut's Department of Administrative Services. The upgrades were done as part of the Small Business Energy Advantage program and resulted in the reduction of almost 681 kW and 4.4 million annual kWh representing approximately $700,000 in annual energy savings.

[3] Ranking via the American Council for an Energy-Efficient Economy ("ACEEE")

Additionally, the Companies and the EEB recommend the establishment of a State Strategic Energy Management Working Group composed of representatives from DEEP, DAS, EEB and Energy Efficiency Fund program administrators to provide input into the creation of the State building energy reduction plan called for in the Act.

Act 11-80 also sets a goal to weatherize eighty (80) percent of Connecticut homes by 2030. In 2010 alone, the Home Energy Solutions program performed weatherization services in [4] nearly 50,000 homes[5]. The Companies in conjunction with the EEB and DEEP are seeking the appropriate definition of Weatherization as well as defining Residential to meet the goal set in Public Act 11-80. The Home Energy Solutions Program serves as the gateway and mechanism to achieve this goal. However, the statute in Act 11-80 that caps funding for fuel-oil heated homes poses a significant challenge in meeting the goal.

Codes, Standards and Changes in the Market Process

The Companies will continue to support the adoption of the most recent energy code and will also continue with their efforts to increase compliance through education and outreach to the design and construction communities, as well as to building owners and building officials. Code compliance is integral to reducing energy consumption and compliance rates increase with awareness of the code and a better understanding of the purpose and inherent benefits.

The Companies and the EEB will also continue to structure program incentives for new construction to encourage owners, design professionals and contractors to go beyond the code requirements and focus on "whole-building" energy modeling and analysis. Given the current state of the residential building market and financial economic environment the Companies believe that adopting more stringent codes will deliver energy savings however the need for enhanced support of the construction industry to achieve code compliance will be paramount.

Energy Efficiency Board

The Energy Efficiency Board (formerly known as the Energy Conservation Management Board) is an appointed group of 14 members, mandated by Connecticut General Statutes § 16-25m and § 16-32f. As required by state statute, the EEB holds public meetings on a regular basis and receives public input. In its September 19, 2001, Final decision in Docket No. 01-01-14, The Department of Public Utility Control, now Public Utilities Regulatory Authority ("PURA"), adopted the EEB's process for obtaining public comment ("Roadmap Process"). Pursuant to the Roadmap Process, the EEB has received

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[4] Weatherization services provided via the Home Energy Solutions core program include, when appropriate, an energy assessment; installation of door, window, shell and duct sealing; limited insulation; and the installation of energy-efficient light bulbs. (See Chapter 2 for more program details.)

[5] Per 2010 Report of the Energy Efficiency Board; Home Energy Solutions served 34,296 homes, Home Energy Solutions-Income Eligible served 15,347 homes.

public comments in connection with the 2012 C&LM Plan. The EEB solicited public involvement at the onset of the 2012 C&LM Plan development process to allow public comments to be incorporated throughout the planning process.

With the passing of Public Act 11-80, the EEB remains in place with two important changes. In Section 33 of the Act, DEEP removes the utilities as voting members of the EEB and establishes the Commissioner of DEEP as the EEB chair. Consistent with prior C&LM plans, this 2012 C&LM Plan was developed with the advice and assistance of the EEB and its consultants.

BUDGET TABLES (ELECTRIC COMPANIES)

Table A1

2012

CL&P/UI Proposed C&LM Budget

CL&P/UI C&LM BUDGET	2012 CL&P Proposed Base Budget	2012 UI Proposed Base Budget	2012 CL&P/UI Proposed Budget Total
RESIDENTIAL			
Residential Retail Products	$ 4,850,000	$ 1,755,855	$ 6,605,855
Total - Consumer Products	**$ 4,850,000**	**$ 1,755,855**	**$ 6,605,855**
Residential New Construction	$ 1,261,000	$ 177,329	$ 1,438,329
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 11,757,000	$ 2,281,658	$ 14,038,658
HES Income Eligible	$ 9,399,700	$ 2,118,093	$ 11,517,793
Subtotal Residential	**$ 27,267,700**	**$ 6,332,935**	**$ 33,600,635**
COMMERCIAL & INDUSTRIAL			
C&I LOST OPPORTUNITY			
Energy Conscious Blueprint	$ 8,503,000	$ 2,386,221	$ 10,889,221
Total - Lost Opportunity	**$ 8,503,000**	**$ 2,386,221**	**$ 10,889,221**
C&I LARGE RETROFIT			
Energy Opportunities	$ 13,241,680	$ 2,957,319	$ 16,198,999
O&M (Services, RetroCx, BSC)	$ 4,171,000	$ 631,298	$ 4,802,298
PRIME	$ 485,000	$ 116,141	$ 601,141
Total - C&I Large Retrofit	**$ 17,897,680**	**$ 3,704,758**	**$ 21,602,438**
Small Business	$ 11,640,000	$ 2,227,636	$ 13,867,636
Subtotal C&I	**$ 38,040,680**	**$ 8,318,615**	**$ 46,359,295**
OTHER - EDUCATION *			
SmartLiving Center® - Museum Partnerships	$ 400,000	$ 481,746	$ 881,746
EE Communities / Behavior Pilot	$ 1,000,000	$ 300,000	$ 1,300,000
K-8 Education	$ 325,000	$ 401,825	$ 726,825
Science Center	$ 166,000	$ 42,000	$ 208,000
Subtotal Education	**$ 1,891,000**	**$ 1,225,571**	**$ 3,116,571**
OTHER - PROGRAMS/REQUIREMENTS			
Institute for Sustainable Energy (ECSU)	$ 448,000	$ 112,000	$ 560,000
Residential Loan Program (Includes ECLF)	$ 2,051,429	$ 347,280	$ 2,398,709
C&I Loan Program	$ 500,000	$ 50,000	$ 550,000
C&LM Loan Defaults	$ 150,000	$ 50,000	$ 200,000
Subtotal Programs/Requirements	**$ 3,149,429**	**$ 559,280**	**$ 3,708,709**
OTHER - LOAD MANAGEMENT			
ISO Load Response Program	$ 3,500,000	$ 1,376,000	$ 4,876,000
Subtotal Load Management	**$ 3,500,000**	**$ 1,376,000**	**$ 4,876,000**
OTHER - RENEWABLES & RD&D			
Research, Development & Demonstration	$ 350,000	$ 225,000	$ 575,000
Subtotal Renewables & RD&D	**$ 350,000**	**$ 225,000**	**$ 575,000**
OTHER - ADMINISTRATIVE & PLANNING			
Administration	$ 900,000	$ 750,000	$ 1,650,000
Marketing Plan	$ 200,000	$ 50,000	$ 250,000
Planning (UI Planning & Evaluation)	$ 650,000	$ 316,765	$ 966,765
Evaluation (UI Evaluation , Outside Services)	$ 2,010,000	$ 570,000	$ 2,580,000
Information Technology	$ 1,700,000	$ 342,500	$ 2,042,500
Energy Efficiency Board	$ 550,000	$ 300,000	$ 850,000
Performance Management Fee	$ 3,982,940	$ 1,003,333	$ 4,986,273
Admin/Planning Expenditures	**$ 9,992,940**	**$ 3,332,598**	**$ 13,325,538**
PROGRAM SUBTOTALS			
Residential	$ 31,056,929	$ 7,781,037	$ 38,837,966
C&I	$ 42,543,880	$ 9,969,364	$ 52,513,244
Other*	$ 10,590,940	$ 3,619,598	$ 14,210,538
TOTAL Note 1	**$ 84,191,749**	**$ 21,369,999**	**$ 105,561,748**

* OTHER -EDUCATION is primarily allocated to residential programs.

Note 1: See Table A2 for Revenue Breakdown

Table A2

2012, 2013, 2014

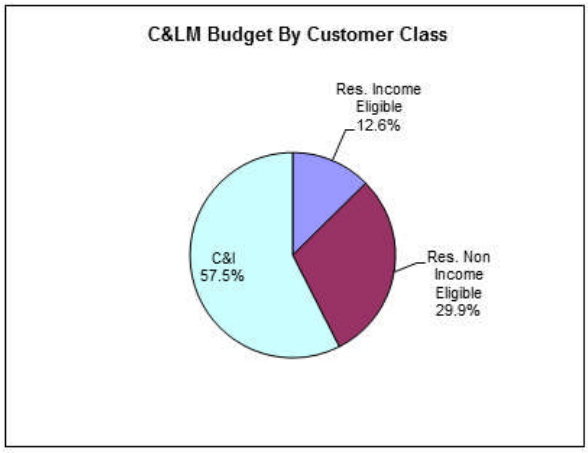
CL&P/UI C&LM Revenues

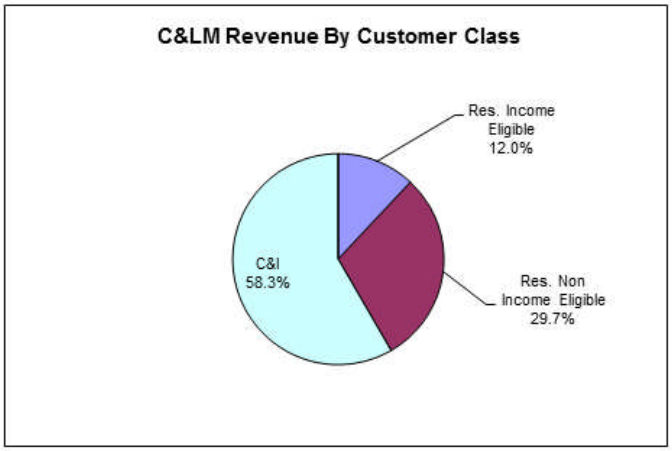
CL&P/UI C&LM REVENUES	2012 Base Budget with RGGI: 2012 CL&P Revenues	2012 Base Budget with RGGI: 2012 UI Revenues	2012 Base Budget with RGGI: 2012 CL&P/UI Total	2012 with RGGI & Increased Savings: 2012 CL&P Revenues	2012 with RGGI & Increased Savings: 2012 UI Revenues	2012 with RGGI & Increased Savings: 2012 CL&P/UI Total
Collections (Mil Rate)	$ 67,359,070	$ 16,494,000	$ 83,853,070	$ 67,359,070	$ 16,494,000	$ 83,853,070
ISO-NE Other Demand Resources (ODRs)	$ 6,500,000	$ 1,600,000	$ 8,100,000	$ 6,500,000	$ 1,600,000	$ 8,100,000
ISO-NE Forward Capacity Market Demand Response Revenues	$ 3,500,000	$ 1,376,000	$ 4,876,000	$ 3,500,000	$ 1,376,000	$ 4,876,000
Class III Renewable Energy Credits	$ 3,600,000	$ 900,000	$ 4,500,000	$ 3,600,000	$ 900,000	$ 4,500,000
Carrying Charges	$ 800,000		$ 800,000	$ 800,000	$ -	$ 800,000
RGGI*	$ 2,432,679	$ 1,000,000	$ 3,432,679	$ 2,432,679	$ 1,000,000	$ 3,432,679
Other Fuel Revenues (Oil Funding)			$ -	$ 12,907,000	$ 4,155,287	$ 17,062,287
Other Revenues (i.e., CAM, other)			$ -	$ 74,337,794	$ 21,934,370	$ 96,272,164
Total - C&LM Revenues	**$ 84,191,749**	**$ 21,370,000**	**$ 105,561,749**	**$ 171,436,543**	**$ 47,459,657**	**$ 218,896,200**

CL&P/UI C&LM REVENUES	2013 Proposed Base Budget: 2013 CL&P Revenues	2013 Proposed Base Budget: 2013 UI Revenues	2013 Proposed Base Budget: 2013 CL&P/UI Total	2014 Proposed Base Budget: 2014 CL&P Revenues	2014 Proposed Base Budget: 2014 UI Revenues	2014 Proposed Base Budget: 2014 CL&P/UI Total
Collections (Mil Rate)	$ 68,429,150	$ 16,515,000	$ 84,944,150	$ 69,467,920	$ 16,641,000	$ 86,108,920
ISO-NE Other Demand Resources (ODRs)	$ 6,200,000	$ 1,600,000	$ 7,800,000	$ 6,000,000	$ 1,600,000	$ 7,600,000
ISO-NE Forward Capacity Market Demand Response Revenues	$ 3,000,000	$ 1,100,000	$ 4,100,000	$ 3,000,000	$ 1,100,000	$ 4,100,000
Class III Renewable Energy Credits	$ 3,200,000	$ 800,000	$ 4,000,000	$ 3,000,000	$ 800,000	$ 3,800,000
RGGI*	$ 2,432,679	$ 1,000,000	$ 3,432,679	$ 2,432,679	$ 1,000,000	$ 3,432,679
Total - C&LM Revenues	**$ 83,261,829**	**$ 21,015,000**	**$ 104,276,829**	**$ 83,900,599**	**$ 21,141,000**	**$ 105,041,599**

*RGGI Budget is based on 50% of the $2.00 / allowance for 2012 through 2014

Statewide (CL&P and UI) 2012 C&LM Budget and Parity Analysis
Table A1 Pie Chart





Customer Class	Budget ($,000)	% of Total C&LM Budget	% of Residential & C&I Budget	% of Residential & C&I Revenue	Difference
Res. Income Eligible	$11,517,793	10.91%	12.61%	11.98%	0.63%
Res. Non Income Eligible	$27,320,173	25.88%	29.91%	29.68%	0.23%
Residential Subtotal	$38,837,966	36.79%	42.51%	41.66%	0.85%
C&I	$52,513,244	49.75%	57.49%	58.34%	-0.85%
C&I Subtotal	$52,513,244	49.75%	57.49%	58.34%	-0.85%
Residential and C&I Subtotal	$91,351,210	86.54%	100.00%	100.00%	0.00%
Other Expenditures					
Other Expenditures	$14,210,538	13.46%			
Other Expenditures Subtotal	$14,210,538	13.46%			
C&LM TOTAL	**$105,561,748**	**100.00%**			
CL&P	$84,191,749	79.76%			
UI	$21,369,999	20.24%			

Totals may vary due to rounding

TABLE B2
STATEWIDE TOTAL RESOURCE COSTS AND BENEFITS FOR C&LM PROGRAMS

Program	Utility Costs 2012	Customer Cost 2012	Total Resource Cost 2012	Total Resource Benefit 2012	Total Resource B/C Ratio	Annualized Savings kWh	Lifetime Savings kWh	Load Savings kW	Annual Water Savings (Gal)	Lifetime Water Savings (Gal)	Annual Gas Savings (CCF)	Lifetime Gas Savings (CCF)	Peak Day Gas Savings (CCF)	Annual Oil Savings (Gal)	Lifetime Oil Savings (gal)	Annual Propane Savings (Gal)	Lifetime Propane Savings (Gal)	CO2 Emissions Reductions (Lifetime Tons)
Residential Retail Products	$ 6,605,855	$ 4,061,420	$ 10,667,274	$ 39,525,941	3.7	60,625,142	286,962,384	4,597	-	-	-	-	-	-	-	-	-	144,113
TOTAL - CONSUMER PRODUCTS	**$ 6,605,855**	**$ 4,061,420**	**$ 10,667,274**	**$ 39,525,941**	**3.7**	**60,625,142**	**286,962,384**	**4,597**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**144,113**
Water Heating	$ 156,265	$ 327,952	$ 484,217	$ 297,613	0.6	-	-	-	0	0	46,788	561,454	150	0	0	0	0	3,277
Residential New Construction	$ 2,588,329	$ 1,568,480	$ 4,156,809	$ 5,616,392	1.4	1,959,510	32,841,854	459	-	-	98,271	2,456,781	893	2,305	57,620	19,408	485,204	34,541
Home Energy Solutions	$ 19,582,793	$ 4,750,256	$ 24,333,049	$ 47,884,958	2.0	23,348,138	300,774,836	3,365	3,973,757	38,703,558	789,137	15,072,328	6,988	172,276	3,022,801	56,538	732,451	277,377
HES Income Eligible	$ 14,869,368	$ 1,635,748	$ 16,505,116	$ 32,618,734	2.0	16,798,459	156,677,390	1,138	3,049,224	16,441,212	396,948	7,240,811	2,991	333,333	4,103,181	4,413	425,511	169,422
SUB-TOTAL RESIDENTIAL	**$ 43,802,610**	**$ 12,343,856**	**$ 56,146,466**	**$ 125,943,638**	**2.2**	**102,731,249**	**777,256,464**	**9,559**	**7,022,981**	**55,144,770**	**1,331,144**	**25,331,374**	**11,023**	**507,914**	**7,183,602**	**80,359**	**1,643,167**	**628,729**
Energy Conscious Blueprint	$ 14,759,221	$ 1,972,086	$ 16,731,307	$ 52,160,075	3.1	26,793,051	410,981,354	5,468	-	-	712,816	10,843,219	5,415	-	-	-	-	269,678
TOTAL - LOST OPPORTUNITY	**$ 14,759,221**	**$ 1,972,086**	**$ 16,731,307**	**$ 52,160,075**	**3.1**	**26,793,051**	**410,981,354**	**5,468**	**-**	**-**	**712,816**	**10,843,219**	**5,415**	**-**	**-**	**-**	**-**	**269,678**
Energy Opportunities	$ 18,928,999	$ 26,515,711	$ 45,444,710	$ 78,325,473	1.7	51,191,679	634,950,626	7,200	-	-	841,715	9,595,114	13,195	-	-	-	-	374,872
O&M Svcs (BSC, Training, RetroCx)	$ 5,202,298	$ 3,959,966	$ 9,172,264	$ 20,933,206	2.3	18,848,560	156,201,477	2,525	-	-	157,142	1,571,436	1,931	-	-	-	-	87,616
PRIME	$ 601,141	$ 50,513	$ 641,654	$ 16,033,655	25.0	2,320,339	11,601,961	-	-	-	-	-	-	-	-	-	-	5,827
TOTAL - C&I LARGE RETROFIT	**$ 24,732,439**	**$ 30,526,190**	**$ 55,258,629**	**$ 115,292,334**	**2.1**	**72,360,578**	**802,754,063**	**9,725**	**-**	**-**	**998,857**	**11,166,550**	**15,126**	**-**	**-**	**-**	**-**	**468,314**
Small Business	$ 14,167,636	$ 16,490,817	$ 30,658,453	$ 47,033,308	1.5	33,212,419	408,900,900	5,689	-	-	(117,845)	(1,491,706)	(626)	-	-	-	-	196,644
SUB-TOTAL C&I	**$ 53,659,296**	**$ 48,989,093**	**$ 102,648,388**	**$ 214,485,717**	**2.1**	**132,366,049**	**1,622,636,317**	**20,882**	**-**	**-**	**1,593,828**	**20,518,062**	**19,915**	**-**	**-**	**-**	**-**	**934,636**

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BUDGET TABLES (CL&P)

Table A

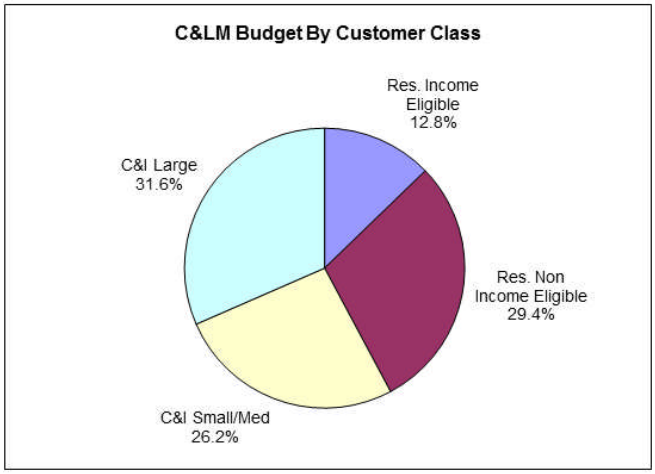
CL&P 2012 Proposed C&LM Budget

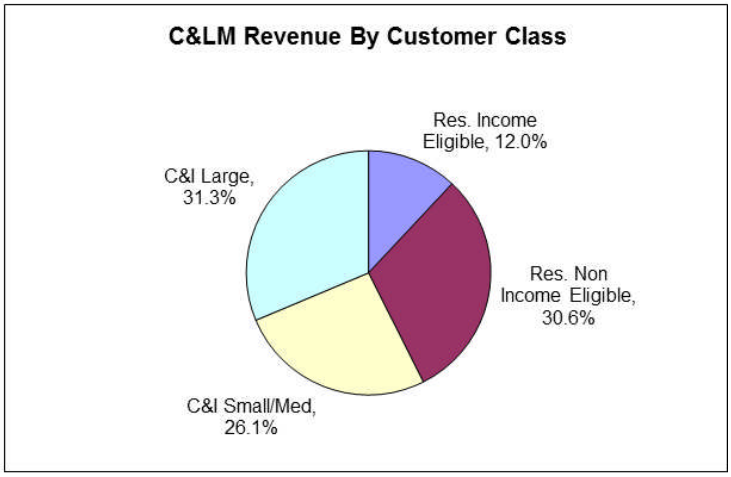
CL&P C&LM BUDGET	2011 CL&P Revised Budget 06/30/11	2012 CL&P Proposed Base Budget 10/01/11	2012 (A) CL&P Proposed Budget Increased Savings 10/01/11	2013 CL&P Proposed Base Budget 10/01/11
RESIDENTIAL				
Residential Retail Products Note 1	$ 6,132,901	$ 4,850,000	$ 10,960,000	$ 4,818,475
Appliance Rebate Program / New Programs	$ -	$ -	$ 4,000,000	$ -
Total - Consumer Products	**$ 6,132,901**	**$ 4,850,000**	**$ 14,960,000**	**$ 4,818,475**
Residential New Construction	$ 1,460,024	$ 1,261,000	$ 1,838,050	$ 1,252,803
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 4	$ 17,749,370	$ 11,757,000	$ 19,905,000	$ 11,729,390
HES Income Eligible	$ 11,027,047	$ 9,399,700	$ 19,039,000	$ 9,338,600
Subtotal Residential	**$ 36,369,342**	**$ 27,267,700**	**$ 55,742,050**	**$ 27,139,268**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 8,759,606	$ 8,503,000	$ 8,669,250	$ 8,447,516
Total - Lost Opportunity	**$ 8,759,606**	**$ 8,503,000**	**$ 8,669,250**	**$ 8,447,516**
C&I LARGE RETROFIT				
Energy Opportunities	$ 25,935,919	$ 13,241,680	$ 33,614,000	$ 13,155,610
O&M (Services, RetroCx, BSC)	$ 4,729,740	$ 4,171,000	$ 9,581,000	$ 4,143,900
PRIME	$ 488,087	$ 485,000	$ 536,550	$ 485,000
Total - C&I Large Retrofit	**$ 31,153,746**	**$ 17,897,680**	**$ 43,731,550**	**$ 17,784,510**
Small Business	$ 13,436,752	$ 11,640,000	$ 38,305,000	$ 11,577,638
Subtotal C&I	**$ 53,350,104**	**$ 38,040,680**	**$ 90,705,800**	**$ 37,809,664**
OTHER - EDUCATION *				
SmartLiving Center® - Museum Partnerships	$ 400,000	$ 400,000	$ 400,350	$ 400,000
EE Communities / Behavior Pilot	$ 850,000	$ 1,000,000	$ 1,500,400	$ 850,000
K-8 Education	$ 225,000	$ 325,000	$ 325,000	$ 325,000
Science Center		$ 166,000	$ 166,000	$ 166,000
Subtotal Education	**$ 1,475,000**	**$ 1,891,000**	**$ 2,391,750**	**$ 1,741,000**
OTHER - PROGRAMS/REQUIREMENTS				
Institute for Sustainable Energy (ECSU)	$ 448,000	$ 448,000	$ 448,000	$ 448,000
Other Funding Requests	$ -	$ -	$ -	$ -
Residential Loan Program (Includes ECLF)	$ 3,650,000	$ 2,051,429	$ 2,050,700	$ 2,175,238
C&I Loan Program	$ 475,000	$ 500,000	$ 500,000	$ 500,000
C&LM Loan Defaults	$ 135,000	$ 150,000	$ 300,000	$ 150,000
Subtotal Programs/Requirements	**$ 4,708,000**	**$ 3,149,429**	**$ 3,298,700**	**$ 3,273,238**
OTHER - LOAD MANAGEMENT				
ISO Load Response Program Note 2	$ 3,000,000	$ 3,500,000	$ 3,500,000	$ 3,000,000
Subtotal Load Management	**$ 3,000,000**	**$ 3,500,000**	**$ 3,500,000**	**$ 3,000,000**
OTHER - RENEWABLES & RD&D				
Research, Development & Demonstration	$ 200,000	$ 350,000	$ 375,900	$ 350,000
Subtotal Renewables & RD&D	**$ 200,000**	**$ 350,000**	**$ 375,900**	**$ 350,000**
OTHER - ADMINISTRATIVE & PLANNING				
Administration	$ 900,000	$ 900,000	$ 1,199,700	$ 900,000
Marketing Plan	$ 176,651	$ 200,000	$ 500,000	$ 200,000
Planning Note 3	$ 650,000	$ 650,000	$ 779,550	$ 650,000
Evaluation Note 3	$ 1,800,000	$ 2,010,000	$ 2,210,400	$ 2,010,000
Information Technology	$ 1,700,000	$ 1,700,000	$ 1,950,000	$ 1,700,000
Energy Efficiency Board	$ 400,000	$ 550,000	$ 650,000	$ 550,000
Performance Management Fee	$ 5,216,455	$ 3,982,940	$ 8,132,693	$ 3,938,659
Subtotal Admin/Planning Expenditures	**$ 10,843,106**	**$ 9,992,940**	**$ 15,422,343**	**$ 9,948,659**
PROGRAM SUBTOTALS				
Residential	$ 41,385,663	$ 31,056,929	$ 60,171,150	$ 30,932,306
C&I	$ 57,245,434	$ 42,543,880	$ 95,519,150	$ 41,782,864
Other*	$ 11,314,455	$ 10,590,940	$ 15,746,243	$ 10,546,659
TOTAL C&LM BUDGET	**$ 109,945,552**	**$ 84,191,749**	**$ 171,436,543**	**$ 83,261,829**
TOTAL	**$ 109,945,552**	**$ 84,191,749**	**$ 171,436,543**	**$ 83,261,829**

* OTHER -EDUCATION is primarily allocated to residential programs.

Note 1: Retail Products includes Retail Lighting and ENERGY STAR Appliances.
Note 2: ISO-NE Load Response Customer payments are funded from the Forward Capacity Market
Note 3: Planning and Evaluation activities split into separate budget line items.
Note 4: Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.

CL&P 2012 C&LM Budget and Parity Analysis
Table A Pie Chart





Customer Class	Budget	% of Total C&LM Budget	% of Residential & C&I Budget	% of Residential & C&I Revenue	Difference
Res. Income Eligible	$9,399,700	11.16%	12.77%	11.98%	0.79%
Res. Non Income Eligible	$21,657,229	25.72%	29.43%	30.61%	-1.18%
Residential Subtotal	$31,056,929	36.89%	42.20%	42.59%	-0.39%
C&I Small/Med	$19,314,922	22.94%	26.24%	26.06%	0.18%
C&I Large	$23,228,958	27.59%	31.56%	31.35%	0.21%
C&I Subtotal	$42,543,880	50.53%	57.80%	57.41%	0.39%
Residential and C&I Subtotal	$73,600,809	87.42%	100.00%	100.0%	0.0%
Other Expenditures					
Other Expenditures	$10,590,940	12.58%			
Other Expenditures Subtotal	$10,590,940	12.58%			
C&LM TOTAL	**$84,191,749**	100.00%			

C&I Non-Gov't	
Budget	Revenue
57.80%	57.41%

Note - Municipalities and state facilities are eligible to participate in C&I Program offerings as applicable.

TABLE B
CL&P 2012 COMPARISON OF CONSERVATION PROGRAMS

COMPARISON OF CL&P CONSERVATION PROGRAMS FOR 2012

Program	Utility Costs (000)	Customer Costs (000)	Total Resource Costs (000)	Electric System Benefit (000)	Total Resource Benefit (000)	Electric System B/C Ratio	Total Resource B/C Ratio	Statewide Total Resource B/C Ratio	# of Units	Units	Annualized Savings (MWh)	Lifetime Savings (MWh)	kW Impact (Y/E)	Demand Cost $/kW**	Demand Cost $/kW-yr**	Cost Rate $/kwh Annualize**	Utility Cost Ratio $/LT-kWh**
RESIDENTIAL																	
Residential Retail Products Note 1	$ 4,850	$ 3,103	$ 7,953	$ 17,205	$ 29,645	3.5	3.7	3.7	1,450,413	Products	45,894	214,581	3,271	$ 1,483	$ 317	$ 0.106	$ 0.023
Total - Consumer Products	**$ 4,850**	**$ 3,103**	**$ 7,953**	**$ 17,205**	**$ 29,645**	**3.5**	**3.7**	**3.7**			**45,894**	**214,581**	**3,271**	**$ 1,483**	**$ 317**	**$ 0.106**	**$ 0.023**
Residential New Construction	$ 1,261	$ 749	$ 2,010	$ 2,319	$ 4,009	1.8	2.0	1.4	499	Homes	1,718	29,901	356	$ 3,538	$ 203	$ 0.734	$ 0.042
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 2	$ 11,757	$ 3,638	$ 15,395	$ 18,701	$ 34,631	1.6	2.2	2.0	21,301	Cust/HVAC Rebates	19,832	259,149	2,631	$ 4,135	$ 316	$ 0.548	$ 0.042
HES Income Eligible	$ 9,400	$ 979	$ 10,379	$ 8,752	$ 22,516	0.9	2.2	2.0	14,445	Customers	13,728	116,400	929	$ 10,121	$ 1,194	$ 0.685	$ 0.081
Subtotal Residential	**$ 27,268**	**$ 8,470**	**$ 35,738**	**$ 46,977**	**$ 90,801**	**1.7**	**2.5**	**2.2**			**81,173**	**620,031**	**7,187**	**$ 3,794**	**$ 497**	**$ 0.336**	**$ 0.044**
COMMERCIAL & INDUSTRIAL																	
C&I LOST OPPORTUNITY																	
Energy Conscious Blueprint	$ 8,503	$ 323	$ 8,826	$ 27,282	$ 34,848	3.2	3.9	3.1	484	Customers	20,055	307,732	4,375	$ 1,944	$ 127	$ 0.424	$ 0.028
Total - Lost Opportunity	**$ 8,503**	**$ 323**	**$ 8,826**	**$ 27,282**	**$ 34,848**	**3.2**	**3.9**	**3.1**			**20,055**	**307,732**	**4,375**	**$ 1,944**	**$ 127**	**$ 0.424**	**$ 0.028**
C&I LARGE RETRO FIT																	
Energy Opportunities	$ 13,242	$ 17,747	$ 30,989	$ 45,260	$ 59,605	3.4	1.9	1.7	590	Customers	42,199	521,131	6,027	$ 2,197	$ 178	$ 0.314	$ 0.025
O&M (Services, RetroCx, BSC) Note 3	$ 4,171	$ 3,261	$ 7,432	$ 13,834	$ 18,518	3.3	2.6	2.3	90	Customers	17,350	144,421	2,349	$ 1,775	$ 213	$ 0.240	$ 0.029
PRIME	$ 485	$ 51	$ 536	$ 803	$ 15,774	1.7	29.5	25.0	72	Customers	1,896	9,479	-	N/A	N/A	$ 0.256	$ 0.051
Large - C& I Retrofit	**$ 17,898**	**$ 21,059**	**$ 38,957**	**$ 59,896**	**$ 93,897**	**3.3**	**2.4**	**2.1**	752		**61,445**	**675,031**	**8,377**	**$ 2,137**	**$ 194**	**$ 0.291**	**$ 0.027**
Small Business	$ 11,640	$ 11,897	$ 23,537	$ 29,754	$ 39,003	2.6	1.7	1.5	1,440	Customers	28,138	344,349	4,828	$ 2,411	$ 197	$ 0.414	$ 0.034
Subtotal C& I	**$ 38,041**	**$ 33,279**	**$ 71,320**	**$ 116,933**	**$ 167,747**	**3.1**	**2.4**	**2.1**			**109,637**	**1,327,112**	**17,579**	**$ 2,164**	**$ 179**	**$ 0.347**	**$ 0.029**
OTHER - EDUCATION *																	
SmartLiving Center® - Museum Partnerships	$ 400	$ -	$ 400														
EE Communities / Behavior Pilot	$ 1,000	$ -	$ 1,000														
K-8 Education	$ 325	$ -	$ 325														
Science Center	$ 166	$ -	$ 166														
Subtotal Education	**$ 1,891**	**$ -**	**$ 1,891**	**$ -**													

TABLE B
CL&P 2012 COMPARISON OF CONSERVATION PROGRAMS

COMPARISON OF CL&P CONSERVATION PROGRAMS FOR 2012

Program	Utility Costs (000)	Customer Costs (000)	Total Resource Costs (000)	Electric System Benefit (000)	Total Resource Benefit (000)	Electric System B/C Ratio	Total Resource B/C Ratio	Statewide Total Resource B/C Ratio	# of Units	Units	Annualized Savings (MWh)	Lifetime Savings (MWh)	kW Impact (Y/E)	Demand Cost $/kW**	Demand Cost $/kW-yr**	Cost Rate $/kwh Annualize**	Utility Cost Ratio $/LT-kWh**
OTHER - PROGRAMS/REQUIREMENTS																	
Institute for Sustainable Energy (ECSU)	$ 448	$ -	$ 448														
Residential Loan Program	$ 2,051	$ -	$ 2,051														
C&I Loan Program	$ 500	$ -	$ 500														
C&LM Loan Defaults	$ 150	$ -	$ 150														
Total Other Programs/Requirements	**$ 3,149**	**$ -**	**$ 3,149**	**$ -**													
OTHER - LOAD MANAGEMENT																	
ISO Load Response Program	$ 3,500	$ -	$ 3,500	$ 3,500	$ 3,500	1.0	1.0		400	Customers	-	-	100,000	$ 35	$ 35	N/A	N/A
Subtotal Load Management	**$ 3,500**	**$ -**	**$ 3,500**	**$ 3,500**	**$ 3,500**	**1.0**	**1.0**				**-**	**-**	**100,000**	**$ 35**	**$ 35**		
OTHER - RENEWABLES & RD&D																	
Research, Development & Demonstration	$ 350	$ -	$ 350														
Subtotal Renewables & RD&D	**$ 350**	**$ -**	**$ 350**	**$ -**													
Administration	$ 900																
Marketing Plan	$ 200																
Planning and Evaluation	$ 2,660																
Information Technology	$ 1,700																
Energy Efficiency Board	$ 550																
Performance Management Fee	$ 3,983																
Subtotal Admin/Planning Expenditures	**$ 9,993**																
PROGRAM SUBTOTALS																	
Residential	**$ 31,057**										**81,173**	**620,031**	**7,187**				
C&I	**$ 42,544**										**109,637**	**1,327,112**	**117,579**				
Other*	**$ 10,591**										**-**	**-**	**-**				
TOTAL C&LM BUDGET	**$ 84,192**	**$ 41,749**	**$ 115,948**	**$ 167,409**	**$ 262,048**	**2.0**	**2.3**				**190,810**	**1,947,143**	**124,766**	**$ 3,258**	**$ 319**	**$ 0.441**	**$ 0.043**

* OTHER -includes ISE/ECSU, RD&D, Admin, Planning & Evaluation, IT, EEB and PMF
** Total Ratio Columns exclude ISO-NE Load Response

Note 1: Beginning in 2006, Retail Lighting and ENERGY STAR Appliances were combined into one program - Residential Retail Products.
Note 2: HES Cost Rates ($/kW, $/kW-Year, $/annual kWH, $/lifetime kWH) include $0.4M of funding for oil meaures. Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 3: O&M Services includes RetroCx, BSC budget and associated savings.
General Note: Costs and benefits associated with the gas programs that are delivered integrated with the electric programs are not included in the TRC analysis of the 2012 electric programs.
Gas program costs and benefits for integrated delivery programs were included in the 2012 Gas Plan.

TABLE B1
CL&P 2012 COMPARISON OF PROGRAM BENEFITS

		Electric System				Non-Electric Benefits				Total Benefits
Program	Rate Impact (Program Costs less DRIPE) (000)	Energy Benefits (000)	Capacity Benefits (000)	DRIPE (000)	Electric System Benefits (000)	Resource Benefits (000)	Non-Resource Benefits (000)	Emissions Benefits (000)	Total Non-Electric Benefits (000)	Total Resource Benefits (000)
RESIDENTIAL										
Residential Retail Products Note 1	$ 509	$ 11,865	$ 1,000	$ 4,341	$ 17,205	$ -	$ 4,456	$ 7,984	$ 12,440	$ 29,645
Total - Consumer Products	$ 509	$ 11,865	$ 1,000	$ 4,341	$ 17,205	$ -	$ 4,456	$ 7,984	$ 12,440	$ 29,645
Residential New Construction	$ 855	$ 1,478	$ 435	$ 406	$ 2,319	$ 1,040	$ 2	$ 648	$ 1,690	$ 4,009
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 2	$ 8,342	$ 13,126	$ 2,160	$ 3,415	$ 18,701	$ 8,582	$ 1,207	$ 6,141	$ 15,930	$ 34,631
HES Income Eligible	$ 7,329	$ 6,320	$ 361	$ 2,071	$ 8,752	$ 9,509	$ 629	$ 3,627	$ 13,764	$ 22,516
Subtotal Residential	$ 17,035	$ 32,789	$ 3,955	$ 10,233	$ 46,977	$ 19,131	$ 6,294	$ 18,400	$ 43,824	$ 90,801
COMMERCIAL & INDUSTRIAL										
C&I LOST OPPORTUNITY										
Energy Conscious Blueprint	$ 2,679	$ 17,316	$ 4,142	$ 5,824	$ 27,282	$ (265)	$ 222	$ 7,608	$ 7,565	$ 34,848
Total - Lost Opportunity	$ 2,679	$ 17,316	$ 4,142	$ 5,824	$ 27,282	$ (265)	$ 222	$ 7,608	$ 7,565	$ 34,848
C&I LARGE RETRO FIT										
Energy Opportunities	$ 2,198	$ 29,989	$ 4,227	$ 11,043	$ 45,260	$ (352)	$ 242	$ 14,456	$ 14,346	$ 59,605
O&M (Services, RetroCx, BSC) Note 3	$ 499	$ 8,910	$ 1,251	$ 3,672	$ 13,834	$ (29)	$ 20	$ 4,693	$ 4,684	$ 18,518
PRIME	$ 265	$ 582	$ -	$ 220	$ 803	$ -	$ 14,609	$ 362	$ 14,971	$ 15,774
Large - C& I Retrofit	$ 2,962	$ 39,482	$ 5,479	$ 14,936	$ 59,896	$ (382)	$ 14,871	$ 19,511	$ 34,000	$ 93,897
Small Business	$ 4,398	$ 19,140	$ 3,372	$ 7,242	$ 29,754	$ (1,131)	$ 777	$ 9,604	$ 9,249	$ 39,003
Subtotal C& I	$ 10,038	$ 75,938	$ 12,992	$ 28,002	$ 116,933	$ (1,778)	$ 15,870	$ 36,723	$ 50,815	$ 167,747
OTHER - LOAD MANAGEMENT										
ISO Load Response Program	$ 3,500	$ -	$ 3,500	$ -	$ 3,500	$ -	$ -	$ -	$ -	$ 3,500
Subtotal Load Management	$ 3,500	$ -	$ 3,500	$ -	$ 3,500	$ -	$ -	$ -	$ -	$ 3,500
Other (Educational, Other Programs/Requirements, RD&D, Admin & Planning)	15,383	-	-	-	-	-	$ -	$ -	$ -	$ -
TOTAL C&LM	$ 45,957	$ 108,727	$ 20,448	$ 38,235	$ 167,409	$ 17,352	$ 22,164	$ 55,123	$ 94,639	$ 262,048

Note 1: Beginning in 2006, Retail Lighting and ENERGY STAR Appliances were combined into one program - Residential Retail Products.
Note 2: Residential HVAC program renamed "CT Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 3: O&M Services includes RetroCx budget, BSC, and associated savings.
General Note: Costs and benefits associated with the gas programs that are delivered integrated with the electric programs are not included in the Total Resource Cost (TRC) analysis of the 2012 electric programs. Gas program costs and benefits for integrated delivery programs are included in the 2012 Gas Plan.

Table C
CL&P 2012 C&LM Budget Details

CL&P C&LM BUDGET ($000)	CL&P Labor	Materials & Supplies	Outside Services	Contractor Labor	Incentives	Marketing	Other **	Administrative Expenses	TOTAL
Residential Retail Products	$ 144	$ 2	$ 865	$ 9	$ 3,180	$ 600	$ 30	$ 20	$ 4,850
Total - Consumer Products	**$ 144**	**$ 2**	**$865**	**$ 9**	**$ 3,180**	**$ 600**	**$ 30**	**$ 20**	**$ 4,850**
Residential New Construction	$ 174	$ 3	$ 35	$ 28	$ 981	$ 35	$ -	$ 5	$ 1,261
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 590	$ 25	$ 364	$ 350	$ 9,996	$ 325	$ 75	$ 32	$ 11,757
HES Income Eligible	$ 662	$ 30	$ 107	$ 442	$ 7,767	$ 275	$ 50	$ 68	$ 9,400
Subtotal Residential	**$ 1,570**	**$ 60**	**$ 1,371**	**$ 829**	**$ 21,924**	**$ 1,235**	**$ 155**	**$ 125**	**$ 27,269**
COMMERCIAL & INDUSTRIAL									
C & I LOST OPPORTUNITY									
Energy Conscious Blueprint	$ 950	$ 10	$ 867	$ 321	$ 6,137	$ 100	$ 70	$ 48	$ 8,503
Total - Lost Opportunity	**$ 950**	**$ 10**	**$ 867**	**$ 321**	**$ 6,137**	**$ 100**	**$ 70**	**$ 48**	**$ 8,503**
C & I LARGE RETROFIT									
Energy Opportunities	$ 1,509	$ 20	$ 377	$ 503	$ 10,563	$ 160	$ 30	$ 80	$ 13,242
O&M (Service, RetroCx, BSC)	$ 517	$ 10	$ 638	$ 52	$ 2,844	$ 60	$ 15	$ 35	$ 4,171
PRIME	$ 45	$ 2	$ 10	$ 2	$ 394	$ 20	$ 3	$ 10	$ 485
Total - C&I Large Retrofit	**$ 2,071**	**$ 32**	**$ 1,025**	**$ 557**	**$ 13,801**	**$ 240**	**$ 48**	**$ 125**	**$ 17,899**
Small Business	$ 683	$ 10	$ 237	$ 274	$ 8,619	$ 300	$ 17	$ 1,500	$ 11,640
Subtotal C&I	**$ 3,704**	**$ 52**	**$ 2,129**	**$ 1,151**	**$ 28,557**	**$ 640**	**$ 135**	**$ 1,673**	**$ 38,042**
OTHER - EDUCATION									
SmartLiving Center® - Museum Partnerships	$ 28	$ 10	$ 347	$ -	$ -	$ 15	$ -	$ -	$ 400
EE Communities / Behavior Pilot	$ 305	$ -	$ 656	$ 15	$ -	$ 20	$ 2	$ 2	$ 1,000
K-8 Education	$ 84	$ 3	$ 231	$ -	$ -	$ 4	$ -	$ 3	$ 325
Science Center	$ -	$ -	$ 166	$ -	$ -	$ -	$ -	$ -	$ 166
Subtotal Education	**$ 417**	**$ 13**	**$ 1,400**	**$ 15**	**$ -**	**$ 39**	**$ 2**	**$ 5**	**$ 1,892**
OTHER - PROGRAMS/REQUIREMENTS									
Institute for Sustainable Energy (ECSU)	$ -	$ -	$ -	$ -	$ -	$ -	$ 448	$ -	$ 448
Other Funding Requests							$ -		$ -
Residential Loan Program	$ 35	$ -	$ 2,013	$ 3	$ -	$ -		$ -	$ 2,051
C&I Loan Program	$ -	$ -	$ 500	$ -	$ -	$ -		$ -	$ 500
C&LM Loan Defaults	$ -	$ -	$ -	$ -	$ -	$ -	$ 150	$ -	$ 150
Subtotal Programs/Requirements	**$ 35**	**$ -**	**$ 2,513**	**$ 3**	**$ -**	**$ -**	**$ 598**	**$ -**	**$ 3,149**
OTHER - LOAD MANAGEMENT									
ISO Load Response Program	$ 342	$ 5	$ 743	$ 94	$ 2,295	$ 10	$ -	$ 12	$ 3,500
Power Factor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Load Management	**$ 342**	**$ 5**	**$ 743**	**$ 94**	**$ 2,295**	**$ 10**	**$ -**	**$ 12**	**$ 3,500**
OTHER - RENEWABLES & RD&D									
Research, Development & Demonstration	$ 73	$ 2	$ 269	$ -	$ -	$ -	$ -	$ 5	$ 349
Subtotal Renewables & RD&D	**$ 73**	**$ 2**	**$ 269**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5**	**$ 349**
OTHER - ADMINISTRATIVE & PLANNING									
Administration	$ 759	$ 4		$ 90	$ -	$ -	$ 17	$ 30	$ 900
Marketing Plan	$ 5	$ -		$ 15	$ -	$ 180	$ -	$ -	$ 200
Planning	$ 579	$ 6	$ 20	$ 5	$ -	$ -	$ 20	$ 19	$ 650
Evaluation	$ 194	$ 5	$ 1,801	$ -	$ -	$ -	$ 5	$ 5	$ 2,010
Information Technology	$ 550	$ 200	$ 870	$ -	$ -	$ -	$ -	$ 80	$ 1,700
Energy Efficiency Board	$ -	$ -	$ 550	$ -	$ -	$ -	$ -	$ -	$ 550
Performance Management Fee	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,983	$ -	$ 3,983
Subtotal Admin/Planning Expenditures	**$ 2,087**	**$ 215**	**$ 3,241**	**$ 110**	**$ -**	**$ 180**	**$ 4,025**	**$ 134**	**$ 9,993**
PROGRAM SUBTOTALS									
Residential	$ 1,960	$ 71	$ 4,550	$ 856	$ 21,924	$ 1,411	$ 157	$ 130	**$ 31,058**
C&I	$ 4,114	$ 59	$ 3,606	$ 1,251	$ 30,852	$ 693	$ 285	$ 1,685	**$ 42,545**
Other*	$ 2,155	$ 217	$ 3,510	$ 95	$ -	$ -	$ 4,473	$ 139	**$ 10,590**
TOTAL C&LM BUDGET	**$ 8,228**	**$ 347**	**$ 11,666**	**$ 2,202**	**$ 52,776**	**$ 2,104**	**$ 4,915**	**$ 1,954**	**$ 84,192**

* Other -includes ISE/ECSU, RD&D, Admin, Planning & Evaluation, and IT

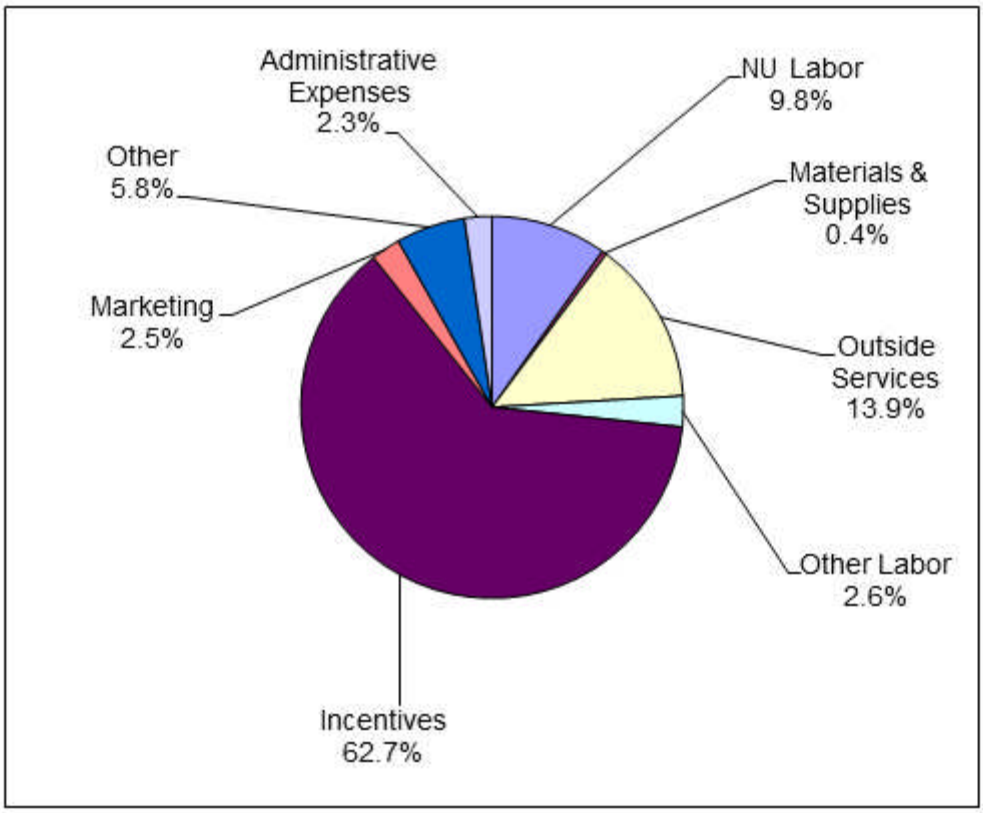
** Other includes Performance Management Fee, ECSU, Energy Conservation Loan Fund, Loan Defaults, Dues, Postage.

CL&P

2011 CONSERVATION & LOAD MANAGEMENT

C&LM Budget By Expense Class

Table C Pie Chart



Expense Classes		Budget	% of Budget
NU Labor	$	8,228	9.8%
Materials & Supplies	$	347	0.4%
Outside Services	$	11,666	13.9%
Other Labor	$	2,202	2.6%
Incentives	$	52,776	62.7%
Marketing	$	2,104	2.5%
Other	$	4,915	5.8%
Administrative Expenses	$	1,954	2.3%
Total	**$**	**84,192**	**100.00%**

Table D
CL&P Historical and Projected $ and kW

	Expenditures $										Load Savings kW									
RESIDENTIAL	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Budget	2012 Budget	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Retail Products Note 1	3,154,881	6,001,655	6,440,269	5,626,761	5,961,939	4,903,424	3,223,833	8,764,502	6,132,901	4,850,000	1,604	6,400	4,832	5,160	5,678	6,257	4,024	14,589	8,691	3,271
Appliance Retirement		1,446,975	2,034,265	1,188,636		268,935						1,042	1,437	443		235				
Appliance Rebate Program								3,615,349	-	-										
Customer Initiated Projects		244,933	329,182									22	37							
Total - Consumer Products	**3,154,881**	**7,693,563**	**8,803,716**	**6,815,397**	**5,961,939**	**5,172,359**	**3,223,833**	**12,379,851**	**6,132,901**	**4,850,000**	**1,604**	**7,464**	**6,306**	**5,603**	**5,678**	**6,492**	**4,024**	**14,589**	**8,691**	**3,271**
Residential New Construction Note 2	1,115,726	767,514	1,187,496	1,688,185	1,414,189	1,563,639	494,394	1,034,433	1,460,024	1,261,000	476	268	1,885	2,225	505	521	256	339	584	356
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 3	1,462,685	1,438,871	2,029,289	4,313,563	5,467,875	7,167,887	7,949,519	22,409,603	17,749,370	11,757,000	972	2,188	2,856	3,151	2,520	3,261	2,220	5,054	5,086	2,631
HES Income Eligible	3,180,815	4,590,734	4,682,547	5,298,638	7,112,363	7,035,693	7,758,362	9,361,764	11,027,047	9,399,700	427	652	806	1,110	1,067	1,271	1,172	1,146	1,767	929
Subtotal RESIDENTIAL	**8,914,107**	**14,490,682**	**16,703,048**	**18,115,783**	**19,956,366**	**20,939,578**	**19,426,108**	**45,185,651**	**36,369,342**	**27,267,700**	**3,479**	**10,572**	**11,853**	**12,089**	**9,770**	**11,545**	**7,671**	**21,128**	**16,128**	**7,187**
COMMERCIAL & INDUSTRIAL																				
C&I LOST OPPORTUNITY																				
Energy Conscious Blueprint Note 4	10,410,843	14,479,658	12,468,319	9,448,615	13,084,740	18,460,585	6,756,126	8,033,028	8,759,606	8,503,000	10,750	21,714	10,655	8,771	9,354	8,279	5,331	4,039	4,237	4,375
Total - Lost Opportunity	**10,410,843**	**14,479,658**	**12,468,319**	**9,448,615**	**13,084,740**	**18,460,585**	**6,756,126**	**8,033,028**	**8,759,606**	**8,503,000**	**10,750**	**21,714**	**10,655**	**8,771**	**9,354**	**8,279**	**5,331**	**4,039**	**4,237**	**4,375**
C&I LARGE RETROFIT																				
C&I RFP	2,049,863	4,037,727	9,176,612								642	3,260	7,355							
Energy Opportunities Note 5	766,397	777,245	1,026,898	9,081,115	22,928,130	29,565,748	10,231,492	17,863,695	25,935,919	13,241,680	1,286	1,426	2,431	15,295	17,675	14,859	6,017	8,693	11,045	6,027
O&M (Service, RetroCx, BSC)	450,905	933,762	1,833,005	1,435,302	1,113,822	1,929,890	1,100,065	1,347,241	4,729,740	4,171,000	142	774	2,208	504	432	711	376	531	2,123	2,349
PRIME Note 6							394,290	476,627	488,087	485,000										
Municipal Energy & Schools Note 7	2,288,449	6,718,880	4,401,007								1,219	761	1,147							
Total - C&I Large Retrofit	**5,555,614**	**12,467,614**	**16,437,522**	**10,516,417**	**24,041,952**	**31,495,638**	**11,725,847**	**19,687,563**	**31,153,746**	**17,897,680**	**3,289**	**6,221**	**13,141**	**15,799**	**18,107**	**15,570**	**6,393**	**9,224**	**13,168**	**8,377**
Small Business	2,167,157	3,263,609	2,710,538	7,497,147	10,204,353	11,390,772	4,879,517	12,100,944	13,436,752	11,640,000	2,430	3,354	2,349	8,497	9,310	8,287	4,987	5,244	6,521	4,828
Subtotal C&I	**18,133,614**	**30,210,881**	**31,616,379**	**27,462,179**	**47,331,045**	**61,346,995**	**23,361,491**	**39,821,535**	**53,350,104**	**38,040,680**	**16,469**	**31,289**	**26,145**	**33,067**	**36,771**	**32,136**	**16,712**	**18,507**	**23,926**	**17,579**
OTHER -EDUCATION																				
Smart Living Center	292,526	61,519	80,760	86,739	207,200	107,047	92,465	131,950	400,000	400,000										
Science Center			200,000	207,200	67,142	214,403	207,171	-		166,000										
EESmarts* (K - 12 Education)	249,053	61,542	242,897	159,987	232,784	208,451	197,076	331,133	225,000	325,000										
EE Communities / Behavior Pilot							46,308	960,047	850,000	1,000,000										
Community Based Program (SWCT)	73,081	96,251	168,371	201,382	212,080															
Subtotal Education	**614,660**	**219,312**	**692,028**	**655,308**	**719,206**	**529,901**	**543,021**	**1,423,130**	**1,475,000**	**1,891,000**										
OTHER -PROGRAMS/REQUIREMENTS																				
Institute for Sustainable Energy (ECSU)	950,000	716,000	404,391	242,000	240,000	320,000	400,000	400,000	448,000	448,000										
Residential Loan Program							18,285	18,569,958	3,650,000	2,051,429										
C&I Loan Program							9,634	204,898	475,000	500,000										
Other Funding Requests								325,385	-	-										
C&LM Loan Defaults	-	139,710	128,126	71,592	57,267	37,923	105,822	110,056	135,000	150,000										
Subtotal Other Programs/Requirements	**950,000**	**855,710**	**532,517**	**313,592**	**297,267**	**357,923**	**533,741**	**19,610,297**	**4,708,000**	**3,149,429**										
OTHER - LOAD MANAGEMENT																				
ISO Load Response Program	2,436,621	140,233	1,411,769	1,241,601	491,060	456,025	102,909	2,864,364	3,000,000	3,500,000	45,951	29,900	60,755	23,576	16,467	17,294	13,296	118,432	110,000	100,000
Demand Reduction Note 8		118,454	62,067	12,663	9,513							263	160	43						
Power Factor		33,000	477,007	123,615	144,901	64,128						531	15,401	4,133	4,412	1,047				
Wait Until 8:00		209,639	100,000																	
Subtotal Load Management	**2,436,621**	**501,326**	**2,050,843**	**1,377,879**	**645,474**	**520,153**	**102,909**	**2,864,364**	**3,000,000**	**3,500,000**	**45,951**	**30,694**	**76,316**	**27,752**	**20,879**	**18,341**	**13,296**	**118,432**	**110,000**	**100,000**
OTHER - RENEWABLES & RD&D																				
Renewables Incentives		7,898	3,019																	
Research, Development & Demonstration	1,721,585	1,117,495	625,597	(22,769)	131,220	114,559	75,087	102,434	200,000	350,000										
Subtotal Renewables & RD&D	**1,721,585**	**1,125,393**	**628,616**	**(22,769)**	**131,220**	**114,559**	**75,087**	**102,434**	**200,000**	**350,000**										
OTHER - ADMINISTRATIVE & PLANNING																				
Administration	2,330,603	852,550	504,237	728,465	663,411	586,204	747,757	835,729	900,000	900,000										
Marketing Plan			284,419	67,020	420,292	3,618	5,804	63,349	176,651	200,000										
Planning and Evaluation	812,535	827,799	2,008,477	1,138,717	750,975	1,433,843	1,617,773	2,053,326	2,450,000	2,660,000										
Information Technology	307,548	701,153	811,572	1,812,738	1,656,432	1,636,204	1,268,936	1,810,543	1,700,000	1,700,000										
Energy Efficiency Board	247,321	98,984	316,021	255,176	309,122	476,793	368,509	431,860	400,000	550,000										
Audit			294,459																	
Performance Management Fee	2,180,501	3,937,752	3,866,548	4,056,741	4,788,385	3,903,735	2,239,767	5,474,571	5,216,455	3,982,940										
Admin/Planning Expenditures	**5,878,508**	**6,418,238**	**8,085,733**	**8,058,857**	**8,588,617**	**8,040,397**	**6,248,547**	**10,669,378**	**10,843,106**	**9,992,940**										
PROGRAM SUB-TOTALS																				
Residential	9,455,646	14,888,079	17,632,785	18,725,643	20,914,521	21,408,083	19,922,869	65,011,019	41,385,663	31,056,929	3,479	10,572	11,853	12,089	9,770	11,545	7,671	21,128	16,128	7,187
C&I	20,643,356	30,673,832	33,842,058	29,024,118	48,215,129	61,970,085	23,650,206	43,231,922	57,245,434	42,543,880	62,420	61,983	102,461	60,819	57,650	50,477	30,008	136,939	133,926	117,579
Other Note 9	8,550,093	8,259,631	8,834,321	8,211,068	8,539,545	8,471,338	6,717,830	11,433,848	11,314,455	10,590,940										
TOTAL (includes ISO Load Response)	**38,649,095**	**53,821,542**	**60,309,164**	**55,960,829**	**77,669,195**	**91,849,506**	**50,290,904**	**119,676,789**	**109,945,552**	**84,191,749**	**65,899**	**72,555**	**114,314**	**72,908**	**67,420**	**62,022**	**37,679**	**158,067**	**150,054**	**124,766**
TOTAL (excludes ISO Load Response)	**36,212,474**	**53,681,309**	**58,897,395**	**54,719,228**	**77,178,135**	**91,393,481**	**50,187,995**	**116,812,425**	**106,945,552**	**80,691,749**	**19,948**	**42,655**	**53,559**	**49,332**	**50,953**	**44,728**	**24,383**	**39,635**	**40,054**	**24,766**

Note 1: Includes Residential Lighting, Smart Living Catalog and Clothes Washers programs.
Note 2: Includes demand savings from the GEO Thermal Heat Pump and Heat Pump Water Heater programs.
Note 3: Includes demand savings from the Spectrum Heat program. In 2007, Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 4: Includes demand savings from the Custom Services program.
Note 5: Includes demand savings from the Express program.
Note 6: Previously included in Energy Conscious Blueprint
Note 7: Includes demand savings from the State Buildings programs.
Note 8: Included in Energy Opportunities
Note 9: ISO Load Management Programs Load Savings kW are included in yearly totals

Table D1

CL&P Historical and Projected Annual kWh and Lifetime kWh

	Annual Savings kWh (000's)										Lifetime Savings kWh (000's)									
RESIDENTIAL	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Retail Products Note 1	12,365	70,088	59,864	64,556	71,908	65,971	42,424	153,834	115,565	45,894	138,487	653,176	453,814	495,351	515,108	542,079	240,352	730,452	444,923	214,581
Appliance Retirement		4,577	7,653	3,197		138						22,377	37,789	15,977		925				
Customer Initiated Projects		284	476									4,713	8,040							
Total - Consumer Products	**12,365**	**74,949**	**67,993**	**67,753**	**71,908**	**66,109**	**42,424**	**153,834**	**115,565**	**45,894**	**138,487**	**680,266**	**499,643**	**511,328**	**515,108**	**543,004**	**240,352**	**730,452**	**444,923**	**214,581**
Residential New Construction Note 2	1,052	547	2,551	3,449	1,510	1,536	845	1,581	2,091	1,718	21,782	9,114	34,399	43,764	19,431	19,910	12,656	25,469	26,507	29,901
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 3	576	1,343	1,862	5,324	7,868	9,367	6,595	22,724	27,817	19,832	10,791	25,460	34,238	60,493	89,643	107,856	85,041	264,136	306,988	259,149
HES Income Eligible	4,971	8,554	8,757	9,604	11,163	12,495	12,135	12,538	17,627	13,728	84,526	135,997	107,224	105,089	109,864	115,014	111,730	104,256	137,298	116,400
Subtotal RESIDENTIAL	**18,964**	**85,393**	**81,163**	**86,130**	**92,449**	**89,507**	**61,999**	**190,678**	**163,100**	**81,173**	**255,586**	**850,837**	**675,504**	**720,674**	**734,046**	**785,784**	**449,778**	**1,124,313**	**915,716**	**620,031**
COMMERCIAL & INDUSTRIAL																				
C&I LOST OPPORTUNITY																				
Energy Conscious Blueprint Note 4	41,942	80,147	60,129	47,925	44,217	49,940	23,225	21,451	22,949	20,055	741,610	1,344,801	1,023,516	812,823	704,845	765,081	382,538	330,357	362,214	307,732
Total - Lost Opportunity	**41,942**	**80,147**	**60,129**	**47,925**	**44,217**	**49,940**	**23,225**	**21,451**	**22,949**	**20,055**	**741,610**	**1,344,801**	**1,023,516**	**812,823**	**704,845**	**765,081**	**382,538**	**330,357**	**362,214**	**307,732**
C&I LARGE RETROFIT																				
C&I RFP	3,447	20,606	45,530								60,381	362,541	811,018							
Energy Opportunities Note 5	5,785	5,832	11,656	94,067	103,936	94,799	48,645	62,208	84,405	42,199	96,507	99,608	156,284	1,664,677	1,466,673	1,227,472	587,275	769,087	1,031,073	521,131
O&M (Service, RetroCx, BSC)	991	3,553	9,124	4,301	3,388	9,265	3,117	3,872	19,146	17,350	10,201	38,613	101,711	62,462	46,154	86,719	28,640	32,401	177,093	144,421
PRIME Note 6							1,233	2,147	1,387	1,896							6,166	10,734	6,935	9,479
Municipal Energy & Schools Note 7	6,220	4,120	15,658								98,804	69,386	269,524							
Total - C&I Large Retrofit	**16,443**	**34,111**	**81,968**	**98,368**	**107,324**	**104,064**	**52,995**	**68,227**	**104,938**	**61,445**	**265,893**	**570,148**	**1,338,537**	**1,727,139**	**1,512,827**	**1,314,191**	**622,081**	**812,223**	**1,215,101**	**675,031**
Small Business	13,109	19,269	13,428	32,492	37,334	37,254	23,250	30,392	42,170	28,138	221,042	328,965	233,226	561,280	468,516	457,376	275,112	376,215	493,393	344,349
Subtotal C&I	**71,494**	**133,527**	**155,525**	**178,785**	**188,875**	**191,258**	**99,470**	**120,071**	**170,057**	**109,637**	**1,228,545**	**2,243,914**	**2,595,279**	**3,101,242**	**2,686,188**	**2,536,648**	**1,279,730**	**1,518,795**	**2,070,708**	**1,327,112**
OTHER -EDUCATION																				
Smart Living Center																				
Science Center																				
EESmarts* (K - 12 Education)																				
EE Communities / Behavior Pilot																				
Community Based Program (SWCT)																				
Subtotal Education																				
OTHER -PROGRAMS/REQUIREMENTS																				
Institute for Sustainable Energy (ECSU)																				
Residential Loan Program																				
C&I Loan Program																				
C&LM Loan Defaults																				
Subtotal Other Programs/Requirements																				
OTHER - LOAD MANAGEMENT																				
ISO Load Response Program	670										6,700									
Demand Reduction Note 8		962	130	2								9,623	1,886	25						
Power Factor																				
Wait Until 8:00																				
Subtotal Load Management	**670**	**962**	**130**	**2**							**6,700**	**9,623**	**1,886**	**25**						
OTHER - RENEWABLES & RD&D																				
Renewables Incentives																				
Research, Development & Demonstration																				
Subtotal Renewables & RD&D																				
OTHER - ADMINISTRATIVE & PLANNING																				
Administration																				
Marketing Plan																				
Planning and Evaluation																				
Information Technology																				
Energy Efficiency Board																				
Audit																				
Performance Management Fee																				
Admin/Planning Expenditures																				
PROGRAM SUB-TOTALS																				
Residential	18,964	85,393	81,163	86,130	92,449	89,507	61,999	190,678	163,100	81,173	255,586	850,837	675,504	720,674	734,046	785,784	449,778	1,124,313	915,716	620,031
C&I	72,164	134,489	155,655	178,787	188,875	191,258	99,470	120,071	170,057	109,637	1,235,245	2,253,537	2,597,165	3,101,267	2,686,188	2,536,648	1,279,730	1,518,795	2,070,708	1,327,112
Other Note 9																				
TOTAL (includes ISO Load Response)	**91,128**	**219,882**	**236,818**	**264,917**	**281,324**	**280,765**	**161,468**	**310,748**	**333,157**	**190,810**	**1,490,831**	**3,104,374**	**3,272,669**	**3,821,941**	**3,420,234**	**3,322,432**	**1,729,508**	**2,643,108**	**2,986,424**	**1,947,143**
TOTAL (excludes ISO Load Response)	**90,458**	**219,882**	**236,818**	**264,917**	**281,324**	**280,765**	**161,468**	**310,748**	**333,157**	**190,810**	**1,484,131**	**3,104,374**	**3,272,669**	**3,821,941**	**3,420,234**	**3,322,432**	**1,729,508**	**2,643,108**	**2,986,424**	**1,947,143**

Note 1: Includes Residential Lighting, Smart Living Catalog and Clothes Washers programs.

Note 2: Includes demand savings from the GEO Thermal Heat Pump and Heat Pump Water Heater programs.

Note 3: Includes demand savings from the Spectrum Heat program. In 2007, Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.

Note 4: Includes demand savings from the Custom Services program.

Note 5: Includes demand savings from the Express program.

Note 6: Previously included in Energy Conscious Blueprint

Note 7: Includes demand savings from the State Buildings programs.

Note 8: Included in Energy Opportunities

Note 9: ISO Load Management Programs Load Savings kW are included in yearly totals

BUDGET TABLES (UI)

Table A

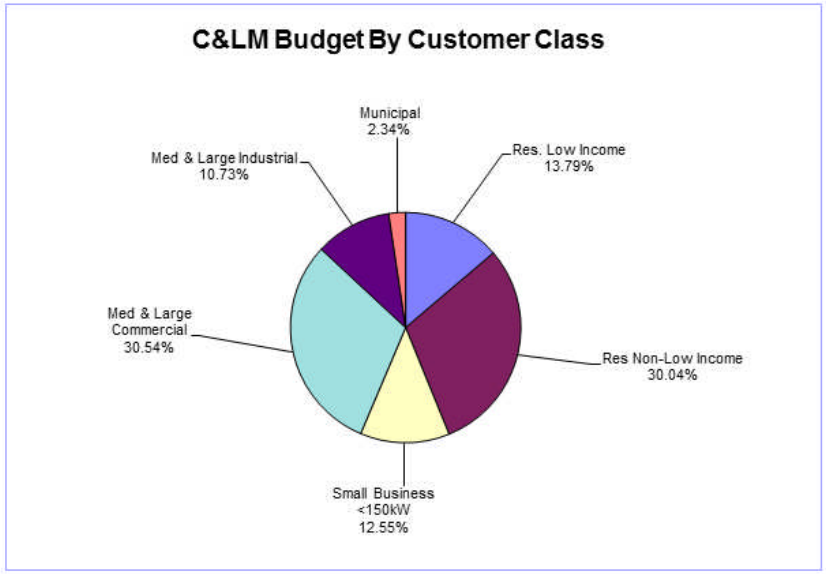
UI 2012 Proposed C&LM Budget

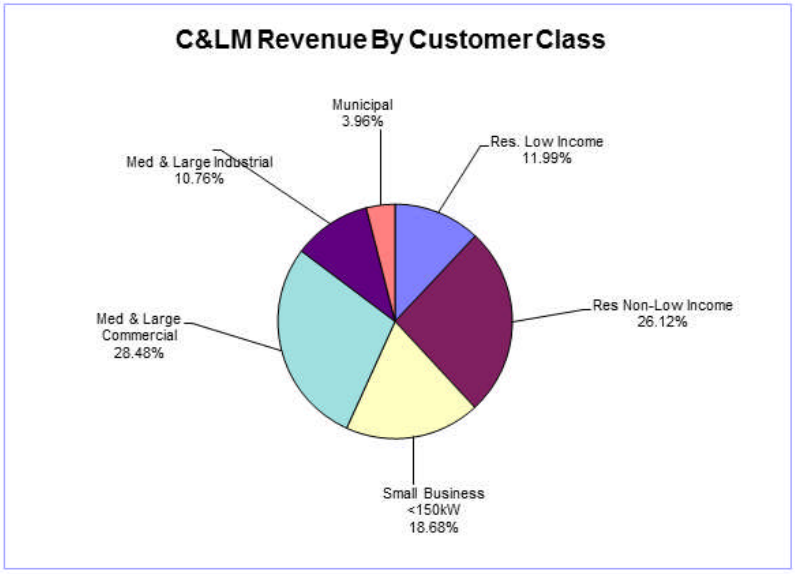
UI C&LM BUDGET	2011 UI REVISED BASE BUDGET 3/15/2011	2012 UI PROPOSED BASE BUDGET 9/1/2011	2012 UI PROPOSED INCREASED SAVINGS BUDGET 9/1/2011	2013 UI PROPOSED BASE BUDGET 9/1/2011
RESIDENTIAL				
Residential Retail Products	$ 2,133,216	$ 1,755,855	3,445,304	1,744,913
Total - Consumer Products	**$ 2,133,216**	**$ 1,755,855**	**$ 3,445,304**	**$ 1,744,913**
Residential New Construction	$ 215,440	$ 177,329	$ 177,329	$ 176,224
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 2,960,781	$ 2,281,658	$ 7,364,631	$ 2,267,440
HES Income Eligible	$ 2,498,996	$ 2,118,093	$ 5,038,002	$ 2,104,894
Subtotal RESIDENTIAL	**$ 7,808,433**	**$ 6,332,935**	**$ 16,025,266**	**$ 6,293,471**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 3,174,527	$ 2,386,221	$ 3,882,818	$ 2,371,352
Total - Lost Opportunity	**$ 3,174,527**	**$ 2,386,221**	**$ 3,882,818**	**$ 2,371,352**
C&I LARGE RETROFIT				
Energy Opportunities	$ 3,811,021	$ 2,957,319	$ 10,529,387	$ 2,938,891
O&M (Services, RetroCx, BSC)	$ 429,667	$ 631,298	$ 3,776,044	$ 627,364
PRIME	$ 86,008	$ 116,141	$ 402,385	$ 115,417
Total - C&I Large Retrofit	**$ 4,326,696**	**$ 3,704,759**	**$ 14,707,816**	**$ 3,681,673**
Small Business	$ 2,717,634	$ 2,227,636	$ 4,512,339	$ 2,213,754
Subtotal C&I	**$ 10,218,857**	**$ 8,318,616**	**$ 23,102,973**	**$ 8,266,779**
OTHER - EDUCATION				
SmartLiving Center®	$ 459,246	$ 481,746	$ 481,746	$ 481,746
EE Communities / Behavioral Pilot	$ 176,822	$ 300,000	$ 300,000	$ 300,000
Science Center	$ -	$ 42,000	$ 42,000	$ 42,000
K - 8 Education	$ 401,825	$ 401,825	$ 401,825	$ 401,825
Subtotal Education	**$ 1,037,893**	**$ 1,225,571**	**$ 1,225,571**	**$ 1,225,571**
OTHER - PROGRAMS/REQUIREMENTS				
Institute for Sustainable Energy (ECSU)	$ 112,000	$ 112,000	$ 112,000	$ 112,000
Residential Loan Program (Includes ECLF)	$ 589,087	$ 347,280	$ 347,280	$ 328,755
C&I Loan Program	$ 50,000	$ 50,000	$ 173,000	$ 50,000
C&LM Loan Defaults	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Subtotal Programs/Requirements	**$ 801,087**	**$ 559,280**	**$ 682,280**	**$ 540,755**
OTHER - LOAD MANAGEMENT				
ISO Load Response Program Support	$ -	$ 1,376,000	$ 1,376,000	$ 1,100,000
Subtotal Load Management	**$ -**	**$ 1,376,000**	**$ 1,376,000**	**$ 1,100,000**
OTHER - RENEWABLES & RD&D				
Research, Development & Demonstration	$ 125,000	$ 225,000	$ 225,000	$ 225,000
Subtotal Renewables & RD&D	**$ 125,000**	**$ 225,000**	**$ 225,000**	**$ 225,000**
OTHER - ADMINISTRATIVE & PLANNING				
Administration	$ 646,635	$ 750,000	$ 750,000	$ 782,163
Planning and Evaluation	$ 308,819	$ 316,765	$ 316,765	$ 332,332
Evaluation, Outside Services	$ 430,000	$ 570,000	$ 570,000	$ 570,000
Information Technology	$ 243,000	$ 342,500	$ 342,500	$ 342,500
EEB	$ 210,000	$ 300,000	$ 350,000	$ 300,000
2011 Performance Management Fee	$ 1,083,486	$ -	$ -	$ -
2012 Performance Management Fee	$ -	$ 1,003,333	$ 2,243,318	$ -
2013 Performance Management Fee	$ -	$ -	$ -	$ 986,429
Marketing Plan	$ 50,000	$ 50,000	$ 250,000	$ 50,000
Admin/Planning Expenditures	**$ 2,971,940**	**$ 3,332,598**	**$ 4,822,583**	**$ 3,363,424**
PROGRAM SUB-TOTALS				
Residential	$ 9,348,199	$ 7,781,037	$ 17,633,368	$ 7,723,048
C&I	$ 10,456,071	$ 9,969,365	$ 24,916,722	$ 9,641,528
Other*	$ 3,158,940	$ 3,619,598	$ 4,909,583	$ 3,650,424
TOTAL C&LM BUDGET	**$ 22,963,210**	**$ 21,370,000**	**$ 47,459,673**	**$ 21,015,000**

* OTHER -EDUCATION is primarily allocated to residential programs.

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT BUDGET PIES
TABLE A





Customer Class		Budget	% of Total C&LM Budget	% of Residential & C&I Budget	% of Residential & C&I Revenue	Difference
Res. Low Income	$	2,448,340	11.46%	13.79%	11.99%	1.81%
Res Non-Low Income	$	5,332,697	24.95%	30.04%	26.12%	3.92%
Residential Sub-total	$	7,781,037	36.41%	43.84%	38.11%	5.73%
Small Business <150kW	$	2,227,636	10.42%	12.55%	18.68%	-6.13%
Med & Large Commercial	$	5,421,082	25.37%	30.54%	28.48%	2.06%
Med & Large Industrial	$	1,904,506	8.91%	10.73%	10.76%	-0.03%
Municipal	$	416,141	1.95%	2.34%	3.96%	-1.62%
C & I Sub-total	$	9,969,365	46.65%	56.16%	61.89%	-5.73%
Sub-total for Residential and C&I	$	17,750,402	83.06%	100.00%	100.00%	0.00%
Other Expenditures	$	3,619,598	16.94%			
Other Expenditures Sub-total	$	3,619,598	16.94%			
GRAND TOTAL *	**$**	**21,370,000**	**100%**			

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
COMPARISON OF UI CONSERVATION PROGRAMS
INCLUDES DRIPE AND CO [2]
TABLE B

Program	Utility Costs 2012	Customer Cost 2012	Total Resource Cost 2012	Electric System Benefit 2012	Total Resource Benefit 2012	Electric System B/C Ratio	Total Resource B/C Ratio	Goals/# Units	Units of Measure	Annualized Savings kWh	Lifetime Savings kWh	Load Savings kW	Demand Cost $/kW	Demand Cost $/kW yr	Utility Cost Rate $/kWh Annualized	Utility Cost Rate $/kWh Lifetime
Residential Retail Products	$ 1,755,855	$ 958,138	$ 2,713,992	$ 5,877,338	$ 9,880,518	3.35	3.64	491,954	Bulbs, Fixtures	14,731,133	72,381,047	1,325.8	$ 1,324	$ 270	$ 0.1192	$ 0.024
TOTAL - CONSUMER PRODUCTS	**$ 1,755,855**	**$ 958,138**	**$ 2,713,992**	**$ 5,877,338**	**$ 9,880,518**	**3.35**	**3.64**			**14,731,133**	**72,381,047**	**1,325.8**	**$ 1,324**	**$ 270**	**$ 0.1192**	**$ 0.024**
Residential New Construction	$ 177,329	$ 154,071	$ 331,400	$ 349,378	$ 434,448	1.97	1.31	113	No. of Units	241,509	2,941,285	103.0	$ 1,722	$ 141	$ 0.7343	$ 0.060
Home Energy Solutions	$ 2,281,658	$ 348,298	$ 2,629,956	$ 3,484,785	$ 5,244,101	1.53	1.99	3,454	No. of Participants	3,515,822	41,625,954	734.1	$ 3,108	$ 263	$ 0.6490	$ 0.055
HES Income Eligible	$ 2,118,093	$ 641,466	$ 2,759,559	$ 2,670,017	$ 6,084,330	1.26	2.20	3,121	Customers	3,070,255	40,277,158	209.7	$ 10,100	$ 770	$ 0.6899	$ 0.053
SUB-TOTAL RESIDENTIAL	**$ 6,332,935**	**$ 2,101,972**	**$ 8,434,907**	**$ 12,381,518**	**$ 21,643,398**	**1.96**	**2.57**			**21,558,719**	**157,225,443**	**2,372.6**	**$ 2,669**	**$ 366**	**$ 0.2938**	**$ 0.040**
Energy Conscious Blueprint (a)	$ 2,386,221	$ 690,775	$ 3,076,997	$ 8,659,995	$ 11,281,917	3.63	3.67	72	Projects	6,738,345	103,249,390	1,093.3	$ 2,183	$ 142	$ 0.3541	$ 0.023
TOTAL - LOST OPPORTUNITY	**$ 2,386,221**	**$ 690,775**	**$ 3,076,997**	**$ 8,659,995**	**$ 11,281,917**	**3.63**	**3.67**			**6,738,345**	**103,249,390**	**1,093.3**	**$ 2,183**	**$ 142**	**$ 0.3541**	**$ 0.023**
Energy Opportunities	$ 3,007,319	$ 5,072,532	$ 8,079,851	$ 9,668,802	$ 12,686,604	3.22	1.57	80	Projects	8,992,818	113,819,163	1,172.2	$ 2,565	$ 203	$ 0.3344	$ 0.026
O&M																
Services (BSC, Training, RetroX)	$ 631,298	$ 336,000	$ 977,298	$ 1,050,052	$ 1,442,016	1.66	1.48	14	Projects	1,498,221	11,780,836	176.1	$ 3,584	$ 456	$ 0.4214	$ 0.054
PRIME	$ 116,141	$ -	$ 106,141	$ 179,783	$ 259,954	1.55	2.45	21	Projects	424,564	2,122,820	-	$ -	$ -	$ 0.2736	$ 0.055
TOTAL - C&I LARGE RETROFIT	**$ 3,754,759**	**$ 5,408,532**	**$ 9,163,290**	**$ 10,898,638**	**$ 14,388,573**	**2.90**	**1.57**			**10,915,603**	**127,722,819**	**1,348.4**	**$ 2,785**	**$ 238**	**$ 0.3440**	**$ 0.029**
Small Business	$ 2,227,636	$ 4,202,702	$ 6,430,338	$ 5,701,016	$ 7,392,134	2.56	1.15	191	Projects	5,074,638	64,551,988	860.9	$ 2,587	$ 203	$ 0.4390	$ 0.035
SUB-TOTAL C&I	**$ 8,368,616**	**$ 10,302,010**	**$ 18,670,625**	**$ 25,259,648**	**$ 33,062,625**	**3.02**	**1.77**			**22,728,586**	**295,524,197**	**3,302.6**	**$ 2,534**	**$ 195**	**$ 0.3682**	**$ 0.028**
SmartLiving Center®	$ 481,746							15,000	Customers							
EE Communities / Behavioral Pilot	$ 300,000															
Science Center	$ 42,000															
K-8 Education	$ 401,825							2,000	Curriculum							
SUB-TOTAL EDUCATION	**$ 1,225,571**															
Institute for Sustainable Energy (ECSU)	$ 112,000															
Residential Loan Program (Includes ECLF)	$ 347,280															
C&LM Loan Defaults	$ 50,000															
SUB-TOTAL PROGRAMS/REQUIREMENTS	**$ 509,280**															
ISO Load Response Program Support	$ 1,376,000											34,000.0	$ 40	$ 40		
SUB-TOTAL LOAD MANAGEMENT	**$ 1,376,000**											**34,000.0**	**$ 40**	**$ 40**		
Research, Development & Demonstration	$ 225,000															
SUB-TOTAL RENEWABLES AND RD&D	**$ 225,000**															
Administration	$ 750,000															
Planning & Evaluation	$ 316,765															
Evaluation, Outside Services	$ 570,000															
Information Technology	$ 342,500															
EEB	$ 300,000															
2012 Performance Management Fee	$ 1,003,333															
Marketing Plan	$ 50,000															
SUB-TOTAL ADMIN & PLANNING	**$ 3,332,598**															
PROGRAM SUB-TOTALS																
RESIDENTIAL	**$ 7,781,037**	**$ 2,101,972**	**$ 8,434,907**	**$ 12,381,518**	**$ 21,643,398**	**1.59**	**2.57**			**21,558,719**	**157,225,443**	**2,372.6**	**$ 3,280**	**$ 450**	**$ 0.3609**	**$ 0.049**
COMMERCIAL & INDUSTRIAL	**$ 9,969,365**	**$ 10,302,010**	**$ 18,670,625**	**$ 25,259,648**	**$ 33,062,625**	**2.53**	**1.77**			**22,728,586**	**295,524,197**	**3,302.6**	**$ 3,019**	**$ 232**	**$ 0.4386**	**$ 0.034**
OTHER *	**$ 3,619,598**	**$ -**	**$ -**	**$ -**	**$ -**							**34,000.0**				
TOTAL C&LM BUDGET Note 2	**$ 21,370,000**	**$ 12,403,982**	**$ 27,105,532**	**$ 37,641,167**	**$ 54,706,022**	**1.76**	**2.02**			**44,287,305**	**452,749,640**	**39,675.2**	**$ 3,523**	**$ 345**	**$ 0.4825**	**$ 0.047**

Notes:
(a) Energy Blueprint includes Motors and Cool Choice

* Other - Education is primarily allocated to Residential Programs

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
COMPARISON OF UI CONSERVATION PROGRAMS
INCLUDES DRIPE AND CO ^{2}
TABLE B1

	Electric System				Non-Electric Benefits				
Program	Energy Benefits	Capacity Benefits	DRIPE	Electric System Benefits 2011	Resource Benefits	Non-Resource Benefits	Emissions Benefits	Total Non-Electric Benefits	Total Resource Benefits 2011
Residential Retail Products	$ 4,004,251	$ 433,500	$ 1,439,587	$ 5,877,338	$ -	$ 1,343,537	$ 2,659,642	$ 4,003,180	$ 9,880,518
TOTAL - CONSUMER PRODUCTS	**$ 4,004,251**	**$ 433,500**	**$ 1,439,587**	**$ 5,877,338**	**$ -**	**$ 1,343,537**	**$ 2,659,642**	**$ 4,003,180**	**$ 9,880,518**
Residential New Construction	$ 153,414	$ 131,165	$ 64,799	$ 349,378	$ -	$ 14,553	$ 70,517	$ 85,070	$ 434,448
Home Energy Solutions	$ 2,119,354	$ 689,280	$ 676,150	$ 3,484,785	$ 546,638	$ 168,524	$ 1,044,154	$ 1,759,317	$ 5,244,101
HES Income Eligible	$ 2,057,451	$ 125,739	$ 486,827	$ 2,670,017	$ 2,311,853	$ 113,900	$ 988,560	$ 3,414,313	$ 6,084,330
SUB-TOTAL RESIDENTIAL	**$ 8,334,470**	**$ 1,379,685**	**$ 2,667,363**	**$ 12,381,518**	**$ 2,858,491**	**$ 1,640,515**	**$ 4,762,873**	**$ 9,261,879**	**$ 21,643,398**
Energy Conscious Blueprint	$ 5,799,959	$ 1,008,949	$ 1,851,087	$ 8,659,995	$ (44,115)	$ 105,576	$ 2,560,460	$ 2,621,922	$ 11,281,917
TOTAL - LOST OPPORTUNITY	**$ 5,799,959**	**$ 1,008,949**	**$ 1,851,087**	**$ 8,659,995**	**$ (44,115)**	**$ 105,576**	**$ 2,560,460**	**$ 2,621,922**	**$ 11,281,917**
Energy Opportunities	$ 6,524,763	$ 871,914	$ 2,272,125	$ 9,668,802	$ (300,079)	$ 178,999	$ 3,138,882	$ 3,017,801	$ 12,686,604
O&M									
Services (BSC, Training, RetroX,PRIME)	$ 837,973	$ 68,999	$ 322,864	$ 1,229,835	$ -	$ -	$ 472,134	$ 472,134	$ 1,701,970
TOTAL - C&I LARGE RETROFIT	**$ 7,362,736**	**$ 940,913**	**$ 2,594,988**	**$ 10,898,638**	**$ (300,079)**	**$ 178,999**	**$ 3,611,017**	**$ 3,489,936**	**$ 14,388,573**
Small Business	$ 3,697,627	$ 653,109	$ 1,350,279	$ 5,701,016	$ (210,654)	$ 125,656	$ 1,776,117	$ 1,691,119	$ 7,392,134
SUB-TOTAL C&I	**$ 16,860,323**	**$ 2,602,971**	**$ 5,796,355**	**$ 25,259,648**	**$ (554,848)**	**$ 410,231**	**$ 7,947,594**	**$ 7,802,976**	**$ 33,062,625**
TOTAL C&LM BUDGET	**$ 25,194,792**	**$ 3,982,656**	**$ 8,463,718**	**$ 37,641,167**	**$ 2,303,643**	**$ 2,050,745**	**$ 12,710,467**	**$ 17,064,855**	**$ 54,706,022**

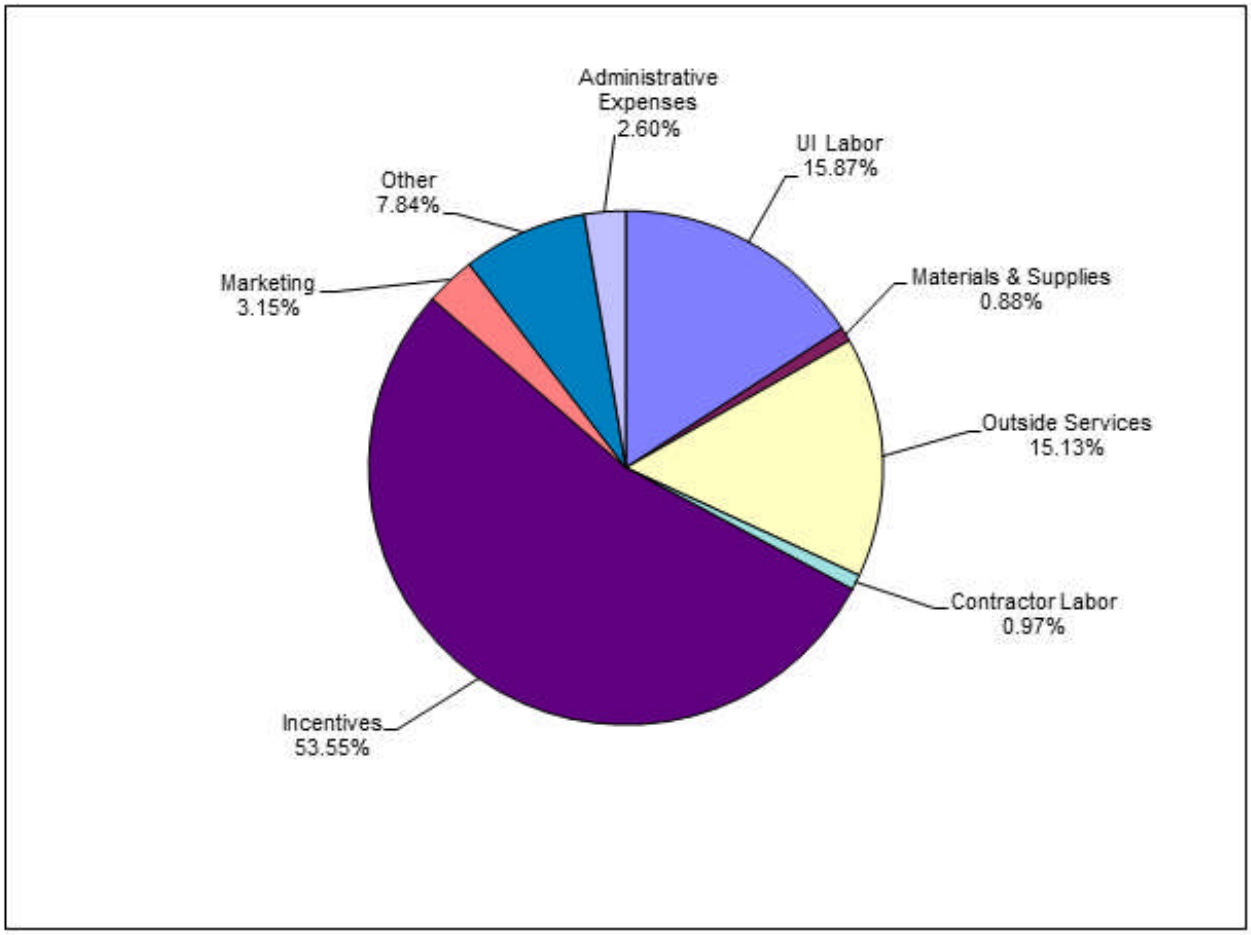
THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
TABLE C

PROGRAM NAME	UI Labor	Materials & Supplies	Outside Services	Contractor Labor	Incentives	Marketing	Other (b)	Administrative Expenses	TOTAL
Residential Retail Products	$ 184,412	$ 4,993	$ 190,000	$ -	$ 1,106,000	$ 260,000	$ 5,803	$ 4,647	$ 1,755,855
TOTAL - CONSUMER PRODUCTS	**$ 184,412**	**$ 4,993**	**$ 190,000**	**$ -**	**$ 1,106,000**	**$ 260,000**	**$ 5,803**	**$ 4,647**	**$ 1,755,855**
Residential New Construction	$ 58,166	$ 1,500	$ 7,500	$ -	$ 92,663	$ 15,000	$ -	$ 2,500	$ 177,329
Home Energy Solutions	$ 271,894	$ 3,500	$ 60,452	$ -	$ 1,835,212	$ 100,500	$ -	$ 10,100	$ 2,281,658
HES Income Eligible	$ 189,057	$ 5,000	$ 31,000	$ -	$ 1,851,536	$ 35,000	$ -	$ 6,500	$ 2,118,093
SUB-TOTAL RESIDENTIAL	**$ 703,529**	**$ 14,993**	**$ 288,952**	**$ -**	**$ 4,885,411**	**$ 410,500**	**$ 5,803**	**$ 23,747**	**$ 6,332,935**
Energy Conscious Blueprint (a)	$ 537,396	$ 3,000	$ 96,000	$ 10,000	$ 1,671,825	$ 30,000	$ 8,000	$ 30,000	$ 2,386,221
TOTAL - LOST OPPORTUNITY	**$ 537,396**	**$ 3,000**	**$ 96,000**	**$ 10,000**	**$ 1,671,825**	**$ 30,000**	**$ 8,000**	**$ 30,000**	**$ 2,386,221**
Energy Opportunities	$ 538,015	$ 3,050	$ 102,500	$ 15,000	$ 2,160,084	$ 33,000	$ 3,000	$ 152,670	$ 3,007,319
O&M Services (RFP, BSC, Training, RetroX, PRIME)	$ 31,696	$ 1,000	$ 476,400	$ -	$ 214,000	$ 15,000	$ 1,250	$ 8,093	$ 747,439
TOTAL - C&I LARGE RETROFIT	**$ 569,711**	**$ 4,050**	**$ 578,900**	**$ 15,000**	**$ 2,374,084**	**$ 48,000**	**$ 4,250**	**$ 160,763**	**$ 3,754,758**
Small Business	$ 262,536	$ 3,266	$ 50,000	$ 10,500	$ 1,559,934	$ 30,000	$ 1,100	$ 310,300	$ 2,227,636
SUB-TOTAL C&I	**$ 1,369,643**	**$ 10,316**	**$ 724,900**	**$ 35,500**	**$ 5,605,843**	**$ 108,000**	**$ 13,350**	**$ 501,063**	**$ 8,368,615**
SmartLiving Center®	$ 65,395	$ 6,521	$ 27,000	$ 171,814	$ -	$ 35,000	$ 174,016	$ 2,000	$ 481,746
EE Communities / Behavioral Pilot	$ 28,297	$ 6,000	$ 253,703	$ -	$ -	$ 12,000	$ -	$ -	$ 300,000
Science Center	$ -	$ -	$ 42,000	$ -	$ -	$ -	$ -	$ -	$ 42,000
K-8 Education	$ 65,395	$ 8,521	$ 197,698	$ -	$ 75,000	$ 47,411	$ -	$ 7,800	$ 401,825
SUB-TOTAL EDUCATION	**$ 159,087**	**$ 21,042**	**$ 520,401**	**$ 171,814**	**$ 75,000**	**$ 94,411**	**$ 174,016**	**$ 9,800**	**$ 1,225,571**
Institute for Sustainable Energy (ECSU)	$ -	$ -	$ -	$ -	$ -	$ -	$ 112,000	$ -	$ 112,000
Residential Loan Program (Includes ECLF)	$ 30,045	$ -	$ -	$ -	$ -	$ -	$ 317,235	$ -	$ 347,280
C&LM Loan Defaults	$ -	$ -	$ -	$ -	$ -	$ -	$ 50,000	$ -	$ 50,000
SUB-TOTAL PROGRAMS/REQUIREMENTS	**$ 30,045**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 479,235**	**$ -**	**$ 509,280**
ISO Load Response Program	$ 125,000	$ 5,000	$ 351,000	$ -	$ 878,000	$ 10,000	$ -	$ 7,000	$ 1,376,000
SUB-TOTAL LOAD MANAGEMENT	**$ 125,000**	**$ 5,000**	**$ 351,000**	**$ -**	**$ 878,000**	**$ 10,000**	**$ -**	**$ 7,000**	**$ 1,376,000**
Research, Development & Demonstration	$ -	$ -	$ 225,000	$ -	$ -	$ -	$ -	$ -	$ 225,000
SUB-TOTAL RENEWABLES AND RD&D	**$ -**	**$ -**	**$ 225,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 225,000**
Administration	$ 643,268	$ 2,500	$ 98,532	$ -	$ -	$ -	$ -	$ 5,700	$ 750,001
Planning & Evaluation	$ 311,348	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,417	$ 316,765
Evaluation, Outside Services	$ -	$ -	$ 570,000	$ -	$ -	$ -	$ -	$ -	$ 570,000
Information Technology	$ 49,983	$ 134,531	$ 155,386	$ -	$ -	$ -	$ -	$ 2,600	$ 342,500
EEB	$ -	$ -	$ 300,000	$ -	$ -	$ -	$ -	$ -	$ 300,000
Marketing Plan	$ -	$ -	$ -	$ -	$ -	$ 50,000	$ -	$ -	$ 50,000
2012 Performance Management Fee	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,003,333	$ -	$ 1,003,333
SUB-TOTAL ADMIN & PLANNING	**$ 1,004,599**	**$ 137,031**	**$ 1,123,918**	**$ -**	**$ -**	**$ 50,000**	**$ 1,003,333**	**$ 13,717**	**$ 3,332,599**
PROGRAM SUB-TOTALS									
RESIDENTIAL	$ 873,923	$ 33,531	$ 744,812	$ 137,451	$ 4,960,411	$ 535,511	$ 462,251	$ 33,147	$ 7,781,037
COMMERCIAL & INDUSTRIAL	$ 1,513,381	$ 17,820	$ 1,140,441	$ 69,863	$ 6,483,843	$ 137,400	$ 98,153	$ 508,463	$ 9,969,364
OTHER	$ 1,004,599	$ 137,031	$ 1,348,918	$ -	$ -	$ -	$ 1,115,333	$ 13,717	$ 3,619,599
TOTAL C&LM BUDGET	**$ 3,391,903**	**$ 188,382**	**$ 3,234,171**	**$ 207,314**	**$ 11,444,254**	**$ 672,911**	**$ 1,675,737**	**$ 555,327**	**$ 21,370,000**

Notes:
(a) Energy Blueprint includes Motors and Cool Choice
(b) Other expenses include:
- Performance Management Fee
- Smart Living Center Lease
- Smart Living Center Utilities
- ECSU
- Energy Conservation Loan Fund
- Neighborhood Housing Services
- C&LM Loan Defaults
- NEEP Participation
- Dues
- Postage
- Telephone Expense

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
C&LM BUDGET BY EXPENSE CLASS



Expense Classes		Budget	% of Budget
UI Labor	$	3,391,903	15.87%
Materials & Supplies	$	188,382	0.88%
Outside Services	$	3,234,171	15.13%
Contractor Labor	$	207,314	0.97%
Incentives	$	11,444,254	53.55%
Marketing	$	672,911	3.15%
Other	$	1,675,737	7.84%
Administrative Expenses	$	555,328	2.60%
Total	$	21,370,000	100.00%

Table D

UI Historical and Projected $ and kW

Expenditures $ (000)

RESIDENTIAL	2001 Actual	2002 Actual	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Residential Retail Products	1,589	1,303	592	1,267	1,592	1,664	1,247	1,282	1,344	2,430	2,133	1,756
Appliance Retirement	-	-	-	867	887	109	-	160	-	-	-	-
Total - Consumer Products	**1,589**	**1,303**	**592**	**2,134**	**2,479**	**1,773**	**1,247**	**1,442**	**1,344**	**2,430**	**2,133**	**1,756**
Residential New Construction	497	520	357	606	1,140	375	153	440	198	176	215	177
Home Energy Solutions	229	286	268	423	673	784	1,079	2,067	3,090	3,883	2,961	2,282
HES Income Eligible	1,500	1,168	799	803	1,086	1,250	1,107	939	3,448	2,976	2,499	2,118
Subtotal RESIDENTIAL	**3,815**	**3,277**	**2,016**	**3,966**	**5,378**	**4,182**	**3,586**	**4,888**	**8,080**	**9,465**	**7,808**	**6,333**
COMMERCIAL & INDUSTRIAL												
C&I LOST OPPORTUNITY												
Energy Conscious Blueprint	2,304	2,019	1,963	2,021	3,787	3,174	5,051	3,422	4,337	5,270	3,175	2,386
Total - Lost Opportunity	**2,304**	**2,019**	**1,963**	**2,021**	**3,787**	**3,174**	**5,051**	**3,422**	**4,337**	**5,270**	**3,175**	**2,386**
C&I LARGE RETROFIT												
C&I RFP	22	88	185	122	387	-	-	-	-	-	-	-
Energy Opportunities	3,401	1,271	1,169	2,259	3,917	2,977	5,843	3,119	4,789	4,845	3,811	3,007
O&M (RetroCx, BSC, RFP,PRIME)	-	-	70	184	108	72	141	17	133	188	516	747
Municipal Energy & Schools	934	775	573	625	828	-	-	-	-	-	-	-
Total - C&I Large Retrofit	**4,357**	**2,134**	**1,997**	**3,190**	**5,240**	**3,049**	**5,984**	**3,136**	**4,922**	**5,033**	**4,327**	**3,755**
Small Business	1,397	997	846	844	1,386	1,638	1,842	2,145	2,170	2,972	2,718	2,228
Subtotal C&I	**8,058**	**5,150**	**4,806**	**6,055**	**10,413**	**7,861**	**12,877**	**8,703**	**11,429**	**13,275**	**10,220**	**8,369**
OTHER - LOAD MANAGEMENT												
ISO Load Response Program Support	63	424	604	33	209	11	8	6	4	-	-	1,376
Subtotal Load Management	**63**	**424**	**604**	**33**	**209**	**11**	**8**	**6**	**4**	-	-	**1,376**
PROGRAM SUB-TOTALS												
Residential	3,815	3,277	2,016	3,966	5,378	4,182	3,586	4,888	8,080	9,465	7,808	6,333
C&I	8,121	5,574	5,410	6,088	10,622	7,872	12,885	8,709	11,433	13,275	10,220	9,745
TOTAL	**11,936**	**8,851**	**7,426**	**10,054**	**16,000**	**12,054**	**16,471**	**13,597**	**19,513**	**22,740**	**18,028**	**16,078**

Load Savings kW

RESIDENTIAL	2001 Actual	2002 Actual	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Residential Retail Products	759	635	639	1,286	1,339	1,158	1,615	1,613	1,186	3,788	3,518	1,326
Appliance Retirement	-	-	-	636	491	36	-	13	-	-	-	-
Total - Consumer Products	**759**	**635**	**639**	**1,922**	**1,830**	**1,194**	**1,615**	**1,626**	**1,186**	**3,788**	**3,518**	**1,326**
Residential New Construction	62	69	25	173	212	231	290	267	31	52	89	103
Home Energy Solutions	132	2,137	368	728	1,061	631	414	933	984	1,461	861	734
HES Income Eligible	655	597	283	294	416	474	338	229	277	324	252	210
Subtotal RESIDENTIAL	**1,608**	**3,438**	**1,315**	**3,117**	**3,518**	**2,530**	**2,657**	**3,055**	**2,478**	**5,625**	**4,720**	**2,373**
COMMERCIAL & INDUSTRIAL												
C&I LOST OPPORTUNITY												
Energy Conscious Blueprint	5,134	3,761	3,815	4,180	4,367	4,685	2,622	2,337	2,620	1,329	1,335	1,093
Total - Lost Opportunity	**5,134**	**3,761**	**3,815**	**4,180**	**4,367**	**4,685**	**2,622**	**2,337**	**2,620**	**1,329**	**1,335**	**1,093**
C&I LARGE RETROFIT												
C&I RFP	36	87	521	59	81	-	-	-	-	-	-	-
Energy Opportunities	4,799	2,467	2,191	3,180	3,850	3,345	3,993	3,530	2,977	2,303	2,057	1,172
O&M (RetroCx, BSC, RFP,PRIME)	-	-	-	-	674	237	55	-	27	-	168	176
Municipal Energy & Schools	859	1,107	1,317	1,019	427	-	-	-	-	-	-	-
Total - C&I Large Retrofit	**5,694**	**3,661**	**4,029**	**4,258**	**5,032**	**3,582**	**4,048**	**3,530**	**3,004**	**2,303**	**2,225**	**1,348**
Small Business	683	659	1,031	1,035	1,963	1,661	2,008	2,149	1,574	1,172	1,238	861
Subtotal C&I	**11,511**	**8,081**	**8,875**	**9,473**	**11,362**	**9,927**	**8,678**	**8,016**	**7,198**	**4,804**	**4,798**	**3,303**
OTHER - LOAD MANAGEMENT												
ISO Load Response Program Support	10,925	10,925	14,465	3,975	2,060	3,338	2,867	1,868	782	89	-	34,000
Subtotal Load Management	**10,925**	**10,925**	**14,465**	**3,975**	**2,060**	**3,338**	-	-	**782**	**89**	-	**34,000**
PROGRAM SUB-TOTALS												
Residential	1,608	3,438	1,315	3,117	3,518	2,530	2,657	3,055	2,478	5,625	4,720	2,373
C&I	22,436	19,006	23,340	13,448	13,422	13,265	11,545	9,884	7,980	4,893	4,798	37,303
TOTAL	**24,044**	**22,444**	**24,655**	**16,565**	**16,940**	**15,795**	**14,202**	**12,939**	**10,458**	**10,518**	**9,518**	**39,675**

Table D1

UI Historical and Projected Annual kWh and Lifetime kWh

Annual kWh (000)

RESIDENTIAL	2001 Actual	2002 Actual	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Residential Retail Products	9,563	7,997	3,465	12,166	14,968	15,216	21,152	17,390	12,485	42,955	39,951	14,731
Appliance Retirement	-	-	-	2,667	2,567	261	-	7	-	-	-	-
Total - Consumer Products	**9,563**	**7,997**	**3,465**	**14,833**	**17,535**	**15,477**	**21,152**	**17,397**	**12,485**	**42,955**	**39,951**	**14,731**
Residential New Construction	208	230	297	385	1,038	1,038	1,672	802	62	123	313	242
Home Energy Solutions	75	1,216	231	415	517	455	1,063	3,331	2,515	5,134	4,147	3,516
HES Income Eligible	6,086	5,550	2,779	4,052	5,130	4,784	3,498	2,511	3,122	4,204	3,576	3,070
Subtotal RESIDENTIAL	**15,932**	**14,993**	**6,772**	**19,685**	**24,220**	**21,754**	**27,385**	**24,041**	**18,184**	**52,416**	**47,987**	**21,559**
COMMERCIAL & INDUSTRIAL												
C&I LOST OPPORTUNITY												
Energy Conscious Blueprint	25,568	18,731	10,994	22,420	20,122	13,765	15,090	14,302	16,308	11,355	9,526	6,738
Total - Lost Opportunity	**25,568**	**18,731**	**10,994**	**22,420**	**20,122**	**13,765**	**15,090**	**14,302**	**16,308**	**11,355**	**9,526**	**6,738**
C&I LARGE RETROFIT												
C&I RFP	228	544	2,414	856	563	-	-	-	-	-	-	-
Energy Opportunities	25,592	13,156	11,929	18,591	24,167	20,704	21,573	20,668	18,128	16,948	12,758	8,993
O&M (RetroCx, BSC, RFP,PRIME)	-	-	-	-	2,206	1,453	2,386	-	498	453	1,186	1,923
Municipal Energy & Schools	4,278	5,511	4,240	5,497	2,059	-	-	-	-	-	-	-
Total - C&I Large Retrofit	**30,098**	**19,211**	**18,583**	**24,944**	**28,995**	**22,157**	**23,959**	**20,668**	**18,626**	**17,401**	**13,944**	**10,916**
Small Business	6,506	6,279	3,578	4,399	7,590	5,830	7,644	9,480	7,914	7,789	7,717	5,075
Subtotal C&I	**62,172**	**44,221**	**33,155**	**51,763**	**56,707**	**41,752**	**46,693**	**44,450**	**42,848**	**36,545**	**31,187**	**22,729**
PROGRAM SUB-TOTALS												
Residential	15,932	14,993	6,772	19,685	24,220	21,754	27,385	24,041	18,184	52,416	47,987	21,559
C&I	62,172	44,221	33,155	51,763	56,707	41,752	46,693	44,450	42,848	36,545	31,187	22,729
TOTAL	**78,104**	**59,214**	**39,927**	**71,448**	**80,927**	**63,506**	**74,078**	**68,491**	**61,032**	**88,961**	**79,174**	**44,287**

Lifetime kWh (000)

RESIDENTIAL	2001 Actual	2002 Actual	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Residential Retail Products	114,927	87,336	34,208	115,967	111,484	126,122	180,938	135,890	84,297	203,783	178,151	72,381
Appliance Retirement	-	-	-	13,002	12,761	1,306	-	90	-	-	-	-
Total - Consumer Products	**114,927**	**87,336**	**34,208**	**128,969**	**124,245**	**127,428**	**180,938**	**135,980**	**84,297**	**203,783**	**178,151**	**72,381**
Residential New Construction	4,338	5,044	5,940	7,412	11,240	15,812	23,327	12,628	884	1,542	3,993	2,941
Home Energy Solutions	1,125	18,240	4,389	7,839	8,264	5,866	11,997	33,731	31,331	51,377	39,636	41,626
HES Income Eligible	60,860	55,500	24,412	17,352	36,581	36,749	32,294	20,676	24,878	40,905	42,455	40,277
Subtotal RESIDENTIAL	**181,250**	**166,120**	**68,949**	**161,572**	**180,330**	**185,855**	**248,556**	**203,015**	**141,390**	**297,607**	**264,235**	**157,225**
COMMERCIAL & INDUSTRIAL												
C&I LOST OPPORTUNITY												
Energy Blueprint / Energy Conscious Construction	383,520	280,965	164,910	336,293	343,568	191,708	224,566	203,135	268,292	177,958	154,180	103,249
Total - Lost Opportunity	**383,520**	**280,965**	**164,910**	**336,293**	**343,568**	**191,708**	**224,566**	**203,135**	**268,292**	**177,958**	**154,180**	**103,249**
C&I LARGE RETROFIT												
C&I RFP	3,420	8,160	36,210	12,835	10,700	-	-	-	-	-	-	-
Energy Opportunities	383,196	190,038	178,935	278,872	409,048	310,557	291,700	272,595	233,761	209,052	159,471	113,819
O&M (RetroCx, BSC, RFP,PRIME)	-	-	-	-	22,061	21,790	35,790	-	3,640	2,855	7,276	13,904
Municipal Energy & Schools	64,170	82,665	63,600	82,451	36,659	-	-	-	-	-	-	-
Total - C&I Large Retrofit	**450,786**	**280,863**	**278,745**	**374,158**	**478,468**	**332,347**	**327,490**	**272,595**	**237,401**	**211,907**	**166,747**	**127,723**
Small Business	97,600	94,200	53,670	65,987	119,909	76,975	92,649	99,684	88,186	97,574	92,339	64,552
Subtotal C&I	**931,906**	**656,028**	**497,325**	**776,438**	**941,945**	**601,030**	**644,705**	**575,414**	**593,879**	**487,439**	**413,266**	**295,524**
PROGRAM SUB-TOTALS												
Residential	181,250	166,120	68,949	161,572	180,330	185,855	248,556	203,015	141,390	297,607	264,235	157,225
C&I	931,906	656,028	497,325	776,438	941,945	601,030	644,705	575,414	593,879	487,439	413,266	295,524
TOTAL	**1,113,156**	**822,148**	**566,274**	**938,010**	**1,122,275**	**786,885**	**893,261**	**778,429**	**735,269**	**785,046**	**677,501**	**452,750**

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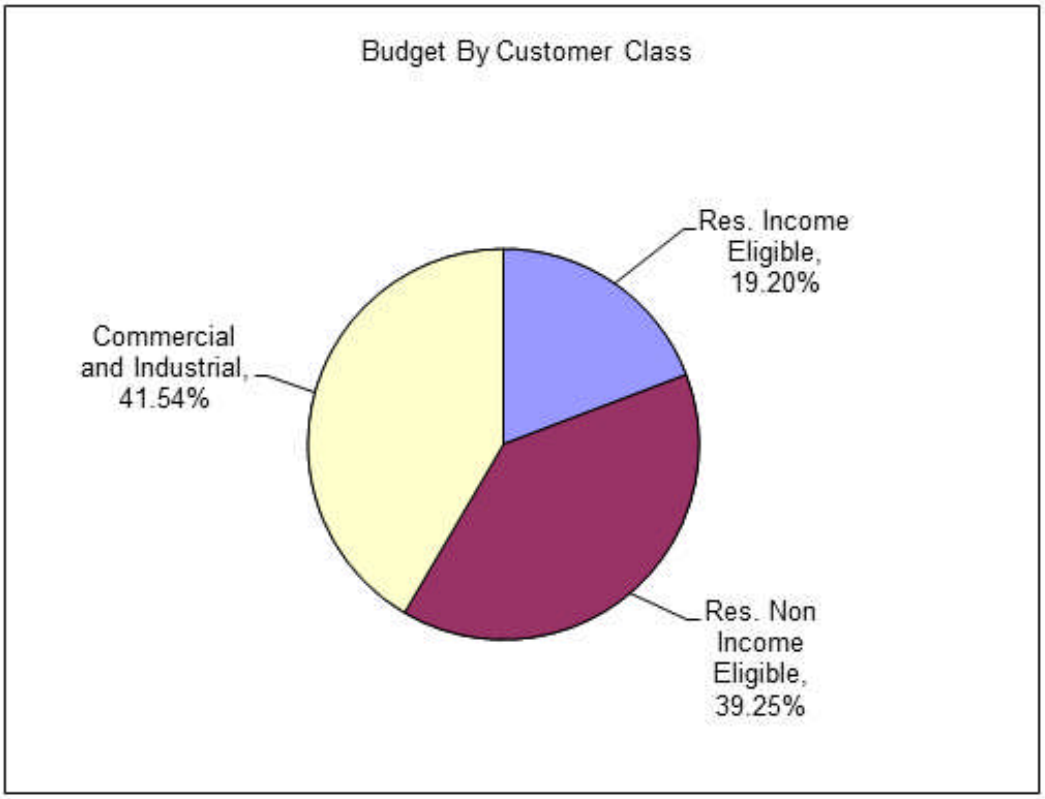
BUDGET TABLES (NATURAL GAS COMPANIES)

Table A1
YGS, CNG & SCG
Proposed Natural Gas Conservation Plan Budget

Natural Gas C&LM Budget	2011 Yankee Filed Budget	2011 CNG Filed Budget	2011 SCG Filed Budget	2011 Combined YGS/CNG/SCG Total	2012 Yankee Proposed Budget	2012 CNG Proposed Budget	2012 SCG Proposed Budget	2012 Combined YGS/CNG/SCG Total
	2011				2012			
RESIDENTIAL								
HES Income Eligible - Weatherization	$ 900,000	$ 800,000	$ 900,000	$ 2,600,000	$ 1,170,000	$ 1,000,000	$ 1,100,000	$ 3,270,000
HES Income Eligible - Audits	$ 30,000	$ 25,772	$ 25,803	$ 81,575	$ 30,000	$ 25,772	$ 25,803	$ 81,575
HES Income Eligible - Total	**$ 930,000**	**$ 825,772**	**$ 925,803**	**$ 2,681,575**	**$ 1,200,000**	**$ 1,025,772**	**$ 1,125,803**	**$ 3,351,575**
Home Energy Solutions (HES)	$ 1,600,000	$ 1,500,000	$ 1,500,000	$ 4,600,000	$ 1,904,000	$ 1,815,345	$ 1,824,790	$ 5,544,135
Residential New Construction	$ 500,000	$ 350,000	$ 300,000	$ 1,150,000	$ 500,000	$ 350,000	$ 300,000	$ 1,150,000
Water Heating	$ 136,600	$ 105,400	$ 121,000	$ 363,000	$ 70,000	$ 40,055	$ 46,210	$ 156,265
Subtotal Residential	**$ 3,166,600**	**$ 2,781,172**	**$ 2,846,803**	**$ 8,794,575**	**$ 3,674,000**	**$ 3,231,172**	**$ 3,296,803**	**$ 10,201,975**
COMMERCIAL & INDUSTRIAL								
C&I LOST OPPORTUNITY								
Energy Conscious Blueprint	$ 1,480,000	$ 1,140,000	$ 1,050,000	$ 3,670,000	$ 1,480,000	$ 1,240,000	$ 1,150,000	$ 3,870,000
Total - Lost Opportunity	**$ 1,480,000**	**$ 1,140,000**	**$ 1,050,000**	**$ 3,670,000**	**$ 1,480,000**	**$ 1,240,000**	**$ 1,150,000**	**$ 3,870,000**
C&I LARGE RETROFIT								
Energy Opportunities	$ 1,020,000	$ 760,000	$ 700,000	$ 2,480,000	$ 1,020,000	$ 860,000	$ 800,000	$ 2,680,000
O&M (RetroCx, Training)	$ 200,000	$ 100,000	$ 100,000	$ 400,000	$ 200,000	$ 100,000	$ 100,000	$ 400,000
Total - C&I Large Retrofit	**$ 1,220,000**	**$ 860,000**	**$ 800,000**	**$ 2,880,000**	**$ 1,220,000**	**$ 960,000**	**$ 900,000**	**$ 3,080,000**
Small Business	$ -	$ -	$ -	$ -	$ 100,000	$ 100,000	$ 100,000	$ 300,000
Subtotal C&I	**$ 2,700,000**	**$ 2,000,000**	**$ 1,850,000**	**$ 6,550,000**	**$ 2,800,000**	**$ 2,300,000**	**$ 2,150,000**	**$ 7,250,000**
OTHER - PROGRAMS/REQUIREMENTS								
CHIF Loan Fund	$ 50,000	$ 50,000	$ 50,000	$ 150,000	$ 50,000	$ 50,000	$ 50,000	$ 150,000
Residential Financing Subsidies	$ 90,000	$ 90,000	$ 90,000	$ 270,000	$ 90,000	$ 90,000	$ 90,000	$ 270,000
C&I Financing Subsidies	$ 50,000	$ 50,000	$ 50,000	$ 150,000	$ 50,000	$ 50,000	$ 50,000	$ 150,000
Subtotal Programs/Requirements	**$ 190,000**	**$ 190,000**	**$ 190,000**	**$ 570,000**	**$ 190,000**	**$ 190,000**	**$ 190,000**	**$ 570,000**
OTHER - ADMINISTRATIVE & PLANNING								
Information Technology	$ 35,000	$ 30,000	$ 30,000	$ 95,000	$ 35,000	$ 30,000	$ 30,000	$ 95,000
Planning	$ 59,000	$ 51,000	$ 51,000	$ 161,000	$ 59,000	$ 51,000	$ 51,000	$ 161,000
Evaluation	$ 234,000	$ 208,000	$ 208,000	$ 650,000	$ 284,000	$ 258,000	$ 258,000	$ 800,000
Energy Efficiency Board	$ 16,500	$ 16,500	$ 16,500	$ 49,500	$ 16,500	$ 16,500	$ 16,500	$ 49,500
Subtotal Other - Administrative & Planning	**$ 344,500**	**$ 305,500**	**$ 305,500**	**$ 955,500**	**$ 394,500**	**$ 355,500**	**$ 355,500**	**$ 1,105,500**
PROGRAM SUBTOTALS								
Residential	$ 3,306,600	$ 2,921,172	$ 2,986,803	$ 9,214,575	$ 3,814,000	$ 3,371,172	$ 3,436,803	$ 10,621,975
C&I	$ 2,750,000	$ 2,050,000	$ 1,900,000	$ 6,700,000	$ 2,850,000	$ 2,350,000	$ 2,200,000	$ 7,400,000
Other	$ 344,500	$ 305,500	$ 305,500	$ 955,500	$ 394,500	$ 355,500	$ 355,500	$ 1,105,500
TOTAL	**$ 6,401,100**	**$ 5,276,672**	**$ 5,192,303**	**$ 16,870,075**	**$ 7,058,500**	**$ 6,076,672**	**$ 5,992,303**	**$ 19,127,475**

Note 1 - 2011 Budgets do not reflect July 2011 PURA approval of $1.2 million increased funding for YGS Residential programs and $1.0 million increased funding for CNG Residential programs.
Note:2- 2011 Budgets do not include PURA approved projects that are over $100K in customer incentive payments.

Statewide 2012 Budget Analysis
Table A1 Pie Chart



Customer Class	Budget ($,000)	% of Total Conservation Budget	% of Residential & C&I Budget
Res. Income Eligible	$3,351,575	17.52%	19.20%
Res. Non Income Eligible	$6,850,400	35.81%	39.25%
Residential Subtotal	$10,201,975	53.34%	58.46%
Commercial and Industrial	$7,250,000	37.90%	41.54%
C&I Subtotal	$7,250,000	37.90%	41.54%
Residential and C&I Subtotal	$17,451,975	91.24%	100.00%
Other Expenditures			
Other Expenditures	$1,675,500	8.76%	
Other Expenditures Subtotal	$1,675,500	8.76%	
TOTAL	**$19,127,475**	**100.00%**	
Yankee	$7,058,500	36.90%	
CNG	$6,076,672	31.77%	
SCG	$5,992,303	31.33%	

Table A2
YGS, CNG & SCG
Natural Gas Conservation Plan Revenues

	2011				2012 - Base			
Natural Gas C&LM Revenues	**2011 Yankee Revenues**	**2011 CNG Revenues**	**2011 SCG Revenues**	**2011 Combined YGS/CNG/SCG Total**	**2012 Yankee Revenues**	**2012 CNG Revenues**	**2012 SCG Revenues**	**2012 Combined YGS/CNG/SCG Total**
Collections (Rates)*	$ 882,000	$ 750,000	$ 300,000	$ 1,932,000	$ -	$ -	$ -	$ -
Conservation Adjustment Mechanism (CAM)**	$ 5,519,100	$ 4,526,672	$ 4,892,303	$ 14,938,075	$ 7,058,500	$ 6,076,672	$ 5,992,303	$ 19,127,475
Gross Receipts Tax (GRT)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenues	**$ 6,401,100**	**$ 5,276,672**	**$ 5,192,303**	**$ 16,870,075**	**$ 7,058,500**	**$ 6,076,672**	**$ 5,992,303**	**$ 19,127,475**

	2012 - Increased Savings				2013			
Natural Gas C&LM Revenues	**2012 Yankee Revenues**	**2012 CNG Revenues**	**2012 SCG Revenues**	**2013 Combined YGS/CNG/SCG Total**	**2013 Yankee Revenues**	**2013 CNG Revenues**	**2013 SCG Revenues**	**2013 Combined YGS/CNG/SCG Total**
Collections (Rates)*	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Conservation Adjustment Mechanism (CAM)**	$ 13,047,184	$ 10,645,821	$ 10,510,984	$ 34,203,989	$ 7,058,500	$ 6,076,672	$ 5,992,303	$ 19,127,475
Gross Receipts Tax (GRT)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Revenues	**$ 13,047,184**	**$ 10,645,821**	**$ 10,510,984**	**$ 34,203,989**	**$ 7,058,500**	**$ 6,076,672**	**$ 5,992,303**	**$ 19,127,475**

*The 2011 Base rate amounts for CNG and SCG are subject to modification and/or proration based upon the final determination of the Superior court appeal of Docket No. 08-12-06 (CNG) and 08-12-07 (SCG)
**Estimated to be collected in CAM:
2012 & 2013 CAM has not yet been filed.

Table B
2012 COMPARISON OF CONSERVATION PROGRAMS

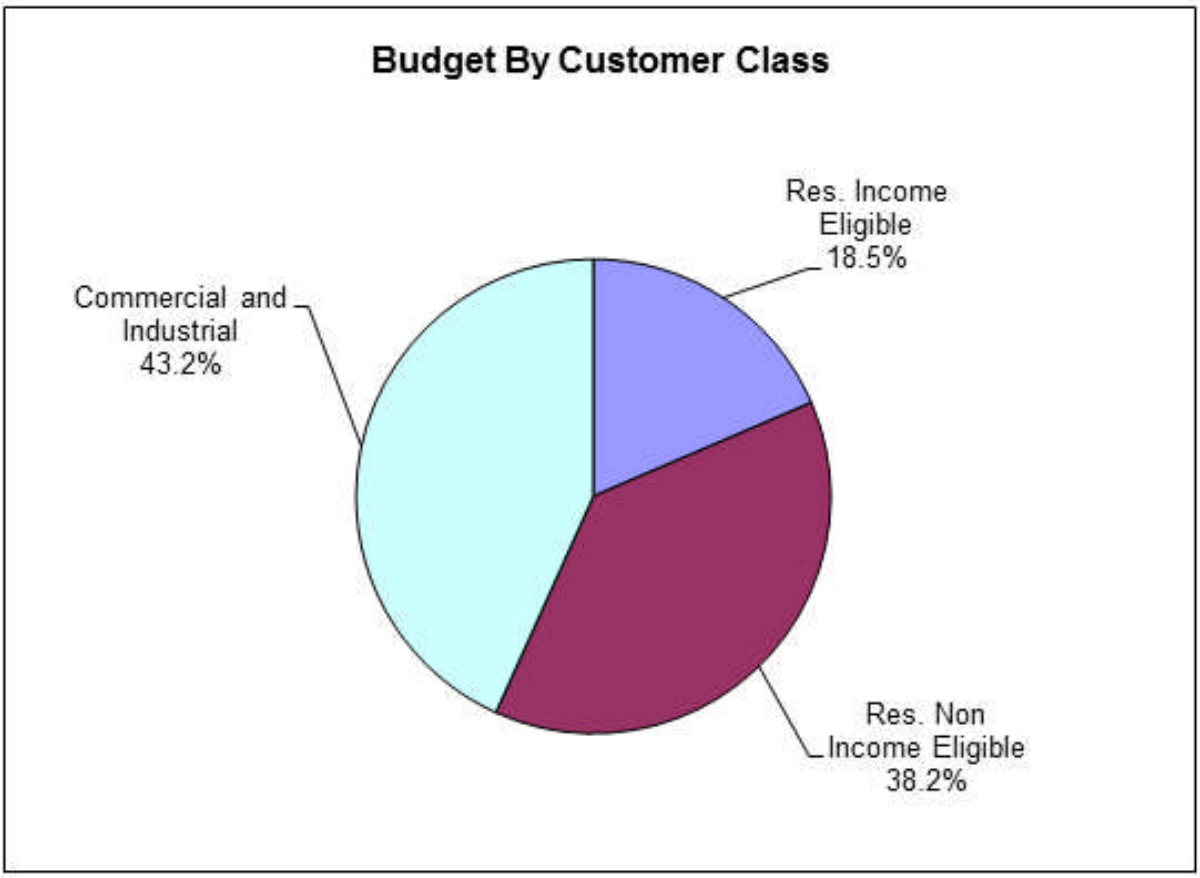
Program	2012 Budget	Customer Cost 2012	Total Resource Cost 2012	Gas Benefit	Total Resource Benefit	% of 2012 Budget	Gas System B/C Ratio	Total Resource B/C Ratio	Goals/ # Units	Units of Measure	Annualized Savings (ccf)	Lifetime Savings (ccf)	Peak Day Savings (ccF)	Annual Cost Rate ($/ccf)	Lifetime Cost Rate ($/ccf)
RESIDENTIAL															
YGS HES Income Eligible	$ 1,200,000	$ -	$ 1,200,000	$ 1,481,815	$ 1,490,517	17.0%	1.23	1.24	1,617	Homes	156,228	2,927,549	1,387	$ 7.68	$ 0.41
CNG HES Income Eligible	$ 1,025,772	$ -	$ 1,025,772	$ 1,050,153	$ 1,187,291	16.9%	1.02	1.16	1,661	Homes	113,054	2,025,706	753	$ 9.07	$ 0.51
SCG HES Income Eligible	$ 1,125,803	$ -	$ 1,125,803	$ 1,185,899	$ 1,340,764	18.8%	1.05	1.19	1,875	Homes	127,667	2,287,555	851	$ 8.82	$ 0.49
Sub Total HES Income Eligible	**$ 3,351,575**	**$ -**	**$ 3,351,575**	**$ 3,717,868**	**$ 4,018,571**	**17.5%**	**1.11**	**1.20**	**5,153**	**Homes**	**396,948**	**7,240,811**	**2,991**	**$ 8.44**	**$ 0.46**
YGS Home Energy Solutions	$ 1,904,000	$ 413,419	$ 2,317,419	$ 2,807,196	$ 2,832,738	27.0%	1.47	1.22	2,952	Homes & HVAC Rebated	303,115	5,488,597	2,593	$ 6.28	$ 0.35
CNG Home Energy Solutions	$ 1,815,345	$ 174,655	$ 1,990,000	$ 2,429,963	$ 2,582,126	29.9%	1.34	1.30	2,029	Homes & HVAC Rebated	242,255	4,776,921	2,191	$ 7.49	$ 0.38
SCG Home Energy Solutions	$ 1,824,790	$ 175,601	$ 2,000,391	$ 2,445,147	$ 2,595,433	30.5%	1.34	1.30	2,042	Homes & HVAC Rebated	243,767	4,806,811	2,205	$ 7.49	$ 0.38
Sub Total Home Energy Solutions	**$ 5,544,135**	**$ 763,675**	**$ 6,307,810**	**$ 7,682,306**	**$ 8,010,297**	**29.0%**	**1.39**	**1.27**	**7,023**	**Homes**	**789,137**	**15,072,328**	**6,988**	**$ 7.03**	**$ 0.37**
YGS New Construction	$ 500,000	$ 106,355	$ 606,355	$ 519,877	$ 519,877	7.1%	1.04	0.86	224	Homes	43,996	1,099,892	374	$ 11.36	$ 0.45
CNG New Construction	$ 350,000	$ 303,501	$ 653,501	$ 354,593	$ 354,593	5.8%	1.01	0.54	107	Homes	29,480	736,990	282	$ 11.87	$ 0.47
SCG New Construction	$ 300,000	$ 255,281	$ 555,281	$ 298,256	$ 298,256	5.0%	0.99	0.54	90	Homes	24,796	619,898	237	$ 12.10	$ 0.48
Sub Total New Construction	**$ 1,150,000**	**$ 665,138**	**$ 1,815,138**	**$ 1,172,725**	**$ 1,172,725**	**6.0%**	**1.02**	**0.65**	**421**	**Homes**	**98,271**	**2,456,781**	**893**	**$ 11.70**	**$ 0.47**
YGS Water Heating	$ 70,000	$ 170,752	$ 240,752	$ 152,765	$ 152,765	1.0%	2.18	0.63	569	Units	24,361	292,328	78	$ 2.87	$ 0.24
CNG Water Heating	$ 40,055	$ 71,400	$ 111,455	$ 65,790	$ 65,790	0.7%	1.64	0.59	238	Units	10,186	122,237	33	$ 3.93	$ 0.33
SCG Water Heating	$ 46,210	$ 85,800	$ 132,010	$ 79,058	$ 79,058	0.8%	1.71	0.60	286	Units	12,241	146,890	39	$ 3.78	$ 0.31
Sub Total Water Heating	**$ 156,265**	**$ 327,952**	**$ 484,217**	**$ 297,613**	**$ 297,613**	**0.8%**	**1.90**	**0.61**	**1,093**	**Units**	**46,788**	**561,454**	**150**	**$ 3.34**	**$ 0.28**
Subtotal Residential	**$ 10,201,975**	**$ 1,756,765**	**$ 11,958,740**	**$ 12,870,512**	**$ 13,499,206**	**53.3%**	**1.26**	**1.13**	**13,690**	**nits**	**1,331,144**	**25,331,374**	**11,023**	**$ 7.66**	**$ 0.40**
Commercial and Industrial C&I Lost Opportunity															
YGS Energy Conscious Blueprint	$ 1,480,000	$ 354,469	$ 1,834,469	$ 2,229,142	$ 2,229,142	21.0%	1.51	1.22	73	Projects	280,342	4,246,241	2,166	$ 5.28	$ 0.35
CNG Energy Conscious Blueprint	$ 1,240,000	$ 315,355	$ 1,555,355	$ 1,985,291	$ 1,985,291	17.6%	1.60	1.28	65	Projects	249,408	3,777,694	1,927	$ 4.97	$ 0.33
SCG Energy Conscious Blueprint	$ 1,150,000	$ 288,487	$ 1,438,487	$ 1,816,144	$ 1,816,144	16.3%	1.58	1.26	59	Projects	228,158	3,455,834	1,763	$ 5.04	$ 0.33
Sub Total Lost Opportunity	**$ 3,870,000**	**$ 958,311**	**$ 4,828,311**	**$ 6,030,577**	**$ 6,030,577**	**20.2%**	**1.56**	**1.25**	**197**	**Projects**	**757,908**	**11,479,769**	**5,855**	**$ 5.11**	**$ 0.34**
Commercial and Industrial Large Retrofit															
YGS Energy Opportunities	$ 1,020,000	$ 1,368,956	$ 2,388,956	$ 2,233,457	$ 2,233,457	14.5%	2.19	0.93	60	Projects	348,479	4,008,441	5,246	$ 2.93	$ 0.25
CNG Energy Opportunities	$ 860,000	$ 1,210,245	$ 2,070,245	$ 1,976,132	$ 1,976,132	14.2%	2.30	0.95	53	Projects	308,078	3,543,718	4,638	$ 2.79	$ 0.24
SCG Energy Opportunities	$ 800,000	$ 1,117,063	$ 1,917,063	$ 1,823,982	$ 1,823,982	13.4%	2.28	0.95	49	Projects	284,358	3,270,872	4,281	$ 2.81	$ 0.24
Sub Total Energy Opportunites	**$ 2,680,000**	**$ 3,696,264**	**$ 6,376,264**	**$ 6,033,571**	**$ 6,033,571**	**14.0%**	**2.25**	**0.95**	**163**	**Projects**	**940,915**	**10,823,031**	**14,164**	**$ 2.85**	**$ 0.25**
YGS O&M	$ 200,000	$ 182,538	$ 382,538	$ 489,969	$ 489,969	2.8%	2.45	1.28	5	Projects	81,938	819,390	1,000	$ 2.44	$ 0.24
CNG O&M	$ 100,000	$ 88,377	$ 188,377	$ 237,400	$ 237,400	1.6%	2.37	1.26	3	Projects	39,671	396,714	484	$ 2.52	$ 0.25
SCG O&M	$ 100,000	$ 91,639	$ 191,639	$ 246,160	$ 246,160	1.7%	2.46	1.28	3	Projects	41,135	411,354	502	$ 2.43	$ 0.24
Sub Total O&M	**$ 400,000**	**$ 362,554**	**$ 752,554**	**$ 973,529**	**$ 973,529**	**2.1%**	**2.43**	**1.28**	**10**	**Projects**	**162,744**	**1,627,458**	**1,986**	**$ 2.46**	**$ 0.25**
YGS Small Business	$ 100,000	$ 124,497	$ 224,497	$ 203,117	$ 203,117	1.4%	2.03	0.90	11	Projects	31,692	364,538	477	$ 3.16	$ 0.27
CNG Small Business	$ 100,000	$ 133,156	$ 233,156	$ 217,422	$ 217,422	1.6%	2.17	0.93	12	Projects	33,896	389,894	510	$ 2.95	$ 0.26
SCG Small Business	$ 100,000	$ 133,156	$ 233,156	$ 217,422	$ 217,422	1.7%	2.17	0.93	12	Projects	33,896	389,894	510	$ 2.95	$ 0.26
Sub Total Small Business	**$ 300,000**	**$ 390,808**	**$ 690,808**	**$ 637,960**	**$ 637,960**	**1.6%**	**2.13**	**0.92**	**34**	**Projects**	**99,484**	**1,144,326**	**1,498**	**$ 3.02**	**$ 0.26**
Subtotal Commercial & Industrial	**$ 7,250,000**	**$ 5,407,937**	**$ 12,657,937**	**$ 13,675,637**	**$ 13,675,637**	**37.9%**	**1.89**	**1.08**	**405**	**Projects**	**1,961,051**	**25,074,584**	**23,503**	**$ 3.70**	**$ 0.29**
OTHER															
YGS CHIF, Residential, C&I Loan Program	$ 190,000		$ 190,000			2.7%									
CNG CHIF, Residential, C&I Loan Program	$ 190,000		$ 190,000			3.1%									
SCG CHIF, Residential, C&I Loan Program	$ 190,000		$ 190,000			3.2%									
Sub Total Other - Loan Program	**$ 570,000**		**$ 570,000**			**3.0%**									
YGS IT, Planning, Evaluation, and EEB	$ 394,500		$ 394,500			5.6%									
CNG IT, Planning, Evaluation, and EEB	$ 355,500		$ 355,500			5.9%									
SCG IT, Planning, Evaluation, and EEB	$ 355,500		$ 355,500			5.9%									
Sub Total Other - Evaluation	**$ 1,105,500**		**$ 1,105,500**			**5.8%**									
Subtotal Other	**$ 1,675,500**	**$ -**	**$ 1,675,500**	**$ -**	**$ -**	**8.8%**	**-**	**-**							
PROGRAM SUBTOTALS															
YGS Residential	$ 3,674,000	$ 690,526	$ 4,364,526	$ 4,961,654	$ 4,995,897	52.1%					527,699	9,808,366	4,431	$ 6.96	$ 0.37
CNG Residential	$ 3,231,172	$ 549,556	$ 3,780,728	$ 3,900,499	$ 4,189,799	53.2%					394,974	7,661,854	3,259	$ 8.18	$ 0.42
SCG Residential	$ 3,296,803	$ 516,683	$ 3,813,486	$ 4,008,360	$ 4,313,510	55.0%					408,471	7,861,155	3,332	$ 8.07	$ 0.42
Residential Total	**$ 10,201,975**	**$ 1,756,765**	**$ 11,958,740**	**$ 12,870,512**	**$ 13,499,206**	**53.3%**					**1,331,144**	**25,331,374**	**11,023**	**$ 7.66**	**$ 0.40**
YGS C&I	$ 2,800,000	$ 2,030,459	$ 4,830,459	$ 5,155,685	$ 5,155,685	39.7%					742,451	9,438,610	8,888	$ 3.77	$ 0.30
CNG C&I	$ 2,300,000	$ 1,747,133	$ 4,047,133	$ 4,416,244	$ 4,416,244	37.8%					631,053	8,108,020	7,559	$ 3.64	$ 0.28
SCG C&I	$ 2,150,000	$ 1,630,344	$ 3,780,344	$ 4,103,707	$ 4,103,707	35.9%					587,547	7,527,954	7,055	$ 3.66	$ 0.29
C&I Total	**$ 7,250,000**	**$ 5,407,937**	**$ 12,657,937**	**$ 13,675,637**	**$ 13,675,637**	**37.9%**					**1,961,051**	**25,074,584**	**23,503**	**$ 3.70**	**$ 0.29**
YGS Other	$ 584,500	$ -	$ 584,500	$ -	$ -	8.3%					-	-	-		
CNG Other	$ 545,500	$ -	$ 545,500	$ -	$ -	9.0%					-	-	-		
SCG Other	$ 545,500	$ -	$ 545,500	$ -	$ -	9.1%					-	-	-		
Other Total	**$ 1,675,500**	**$ -**	**$ 1,675,500**	**$ -**	**$ -**	**8.8%**					-	-	-		
YGS TOTAL	$ 7,058,500	$ 2,720,986	$ 9,779,486	$ 10,117,339	$ 10,151,582	36.9%					1,270,150	19,246,976	13,320	$ 5.56	$ 0.37
CNG TOTAL	$ 6,076,672	$ 2,296,689	$ 8,373,361	$ 8,316,743	$ 8,606,044	31.8%					1,026,027	15,769,873	10,818	$ 5.92	$ 0.39
SCG TOTAL	$ 5,992,303	$ 2,147,027	$ 8,139,330	$ 8,112,067	$ 8,417,218	31.3%					996,018	15,389,108	10,388	$ 6.02	$ 0.39
GRAND TOTAL	**$ 19,127,475**	**$ 7,164,702**	**$ 26,292,177**	**$ 26,546,149**	**$ 27,174,843**	**100.0%**	**1.39**	**1.03**			**3,292,195**	**50,405,958**	**34,525**	**$ 5.81**	**$ 0.38**

Table A
YGS
Proposed Natural Gas Conservation Plan Budget

Natural Gas C&LM Budget	2011 Yankee Filed Budget	2012 Yankee Proposed Base Budget	2012 Yankee Proposed Increased Savings	2013 Yankee Proposed Budget
RESIDENTIAL				
HES Income Eligible - Weatherization	$ 900,000	$ 1,170,000	$ 2,181,500	$ 1,170,000
HES Income Eligible - Audits	$ 30,000	$ 30,000	$ 35,000	$ 30,000
HES Income Eligible - Total	**$ 930,000**	**$ 1,200,000**	**$ 2,216,500**	**$ 1,200,000**
Home Energy Solutions (HES)	$ 1,600,000	$ 1,904,000	$ 3,101,859	$ 1,904,000
Residential New Construction	$ 500,000	$ 500,000	$ 600,000	$ 500,000
Water Heating	$ 136,600	$ 70,000	$ 70,000	$ 70,000
Subtotal Residential	**$ 3,166,600**	**$ 3,674,000**	**$ 5,988,359**	**$ 3,674,000**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 1,480,000	$ 1,480,000	$ 3,136,612	$ 1,480,000
Total - Lost Opportunity	**$ 1,480,000**	**$ 1,480,000**	**$ 3,136,612**	**$ 1,480,000**
C&I LARGE RETROFIT				
Energy Opportunities	$ 1,020,000	$ 1,020,000	$ 2,474,834	$ 1,020,000
O&M (RetroCx, Training)	$ 200,000	$ 200,000	$ 324,548	$ 200,000
Total - C&I Large Retrofit	**$ 1,220,000**	**$ 1,220,000**	**$ 2,799,382**	**$ 1,220,000**
Small Business	$ -	$ 100,000	$ 246,081	$ 100,000
Subtotal C&I	**$ 2,700,000**	**$ 2,800,000**	**$ 6,182,075**	**$ 2,800,000**
OTHER - PROGRAMS/REQUIREMENTS				
CHIF Loan Fund	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Residential Financing Subsidies	$ 90,000	$ 90,000	$ 135,000	$ 90,000
C&I Financing Subsidies	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Subtotal Programs/Requirements	**$ 190,000**	**$ 190,000**	**$ 285,000**	**$ 190,000**
OTHER - ADMINISTRATIVE & PLANNING				
Information Technology	$ 35,000	$ 35,000	$ 52,500	$ 35,000
Planning	$ 59,000	$ 59,000	$ 88,500	$ 59,000
Evaluation	$ 234,000	$ 284,000	$ 426,000	$ 284,000
Energy Efficiency Board	$ 16,500	$ 16,500	$ 24,750	$ 16,500
Subtotal Other - Administrative & Planning	**$ 344,500**	**$ 394,500**	**$ 591,750**	**$ 394,500**
PROGRAM SUBTOTALS				
Residential	$ 3,306,600	$ 3,814,000	$ 6,198,359	$ 3,814,000
C&I	$ 2,750,000	$ 2,850,000	$ 6,257,075	$ 2,850,000
Other	$ 344,500	$ 394,500	$ 591,750	$ 394,500
TOTAL	**$ 6,401,100**	**$ 7,058,500**	**$ 13,047,184**	**$ 7,058,500**

Note 1 - 2011 Budget does not reflect July 2011 PURA approval of $1.2 million increased funding for YGS Residential programs.
Note 2 - 2011 Budget does not include PURA approved projects that are over $100K in customer incentive payments.

YGS 2012 Budget Analysis



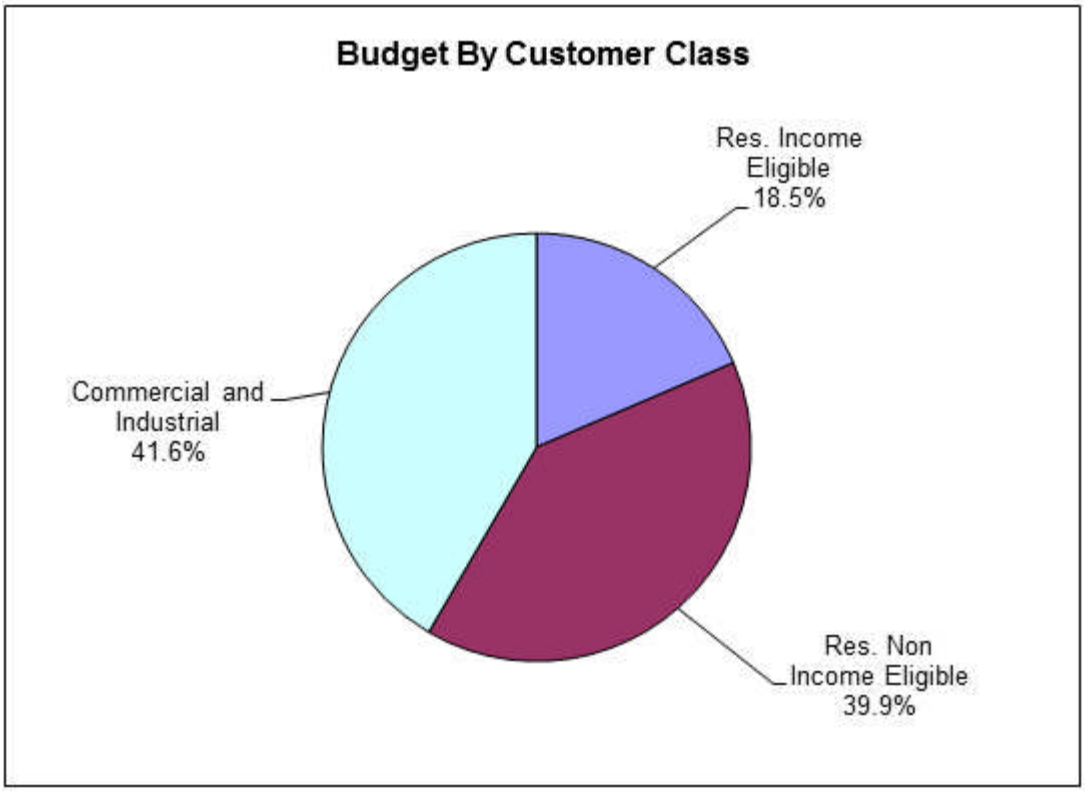
Customer Class	Budget	% of Total Conservation Budget	% of Residential & C&I Budget
Res. Income Eligible	$1,200,000	17.00%	18.54%
Res. Non Income Eligible	$2,474,000	35.05%	38.21%
Residential Subtotal	$3,674,000	52.05%	56.75%
Commercial and Industrial	$2,800,000	39.67%	43.25%
C&I Subtotal	$2,800,000	39.67%	43.25%
Residential and C&I Subtotal	$6,474,000	91.72%	100.00%
Other Expenditures			
Other Expenditures	$584,500	8.28%	
Other Expenditures Subtotal	$584,500	8.28%	
TOTAL	**$7,058,500**	100.00%	

Table A
CNG
Proposed Natural Gas Conservation Plan Budget

Natural Gas C&LM Budget	2011 CNG Filed Budget	2012 CNG Proposed Budget	2012 CNG Proposed Increased Savings	2013 CNG Proposed Budget
RESIDENTIAL				
HES Income Eligible - Weatherization	$ 800,000	$ 1,000,000	$ 2,078,744	$ 1,000,000
HES Income Eligible - Audits	$ 25,772	$ 25,772	$ 25,772	$ 25,772
HES Income Eligible - Total	**$ 825,772**	**$ 1,025,772**	**$ 2,104,516**	**$ 1,025,772**
Home Energy Solutions (HES)	$ 1,500,000	$ 1,815,345	$ 2,852,249	$ 1,815,345
Residential New Construction	$ 350,000	$ 350,000	$ 350,000	$ 350,000
Water Heating	$ 105,400	$ 40,055	$ 40,055	$ 40,055
Subtotal Residential	**$ 2,781,172**	**$ 3,231,172**	**$ 5,346,820**	**$ 3,231,172**
COMMERCIAL & INDUSTRIAL C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 1,140,000	$ 1,240,000	$ 2,362,464	$ 1,240,000
Total - Lost Opportunity	**$ 1,140,000**	**$ 1,240,000**	**$ 2,362,464**	**$ 1,240,000**
C&I LARGE RETROFIT				
Energy Opportunities	$ 760,000	$ 860,000	$ 1,735,328	$ 860,000
O&M (RetroCx, Training)	$ 100,000	$ 100,000	$ 190,515	$ 100,000
Total - C&I Large Retrofit	**$ 860,000**	**$ 960,000**	**$ 1,925,843**	**$ 960,000**
Small Business	$ -	$ 100,000	$ 192,444	$ 100,000
Subtotal C&I	**$ 2,000,000**	**$ 2,300,000**	**$ 4,480,751**	**$ 2,300,000**
OTHER - PROGRAMS/REQUIREMENTS				
CHIF Loan Fund	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Residential Financing Subsidies	$ 90,000	$ 90,000	$ 135,000	$ 90,000
C&I Financing Subsidies	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Subtotal Programs/Requirements	**$ 190,000**	**$ 190,000**	**$ 285,000**	**$ 190,000**
OTHER - ADMINISTRATIVE & PLANNING				
Information Technology	$ 30,000	$ 30,000	$ 45,000	$ 30,000
Planning	$ 51,000	$ 51,000	$ 76,500	$ 51,000
Evaluation	$ 208,000	$ 258,000	$ 387,000	$ 258,000
Energy Efficiency Board	$ 16,500	$ 16,500	$ 24,750	$ 16,500
Subtotal Other - Administrative & Planning	**$ 305,500**	**$ 355,500**	**$ 533,250**	**$ 355,500**
PROGRAM SUBTOTALS				
Residential	$ 2,921,172	$ 3,371,172	$ 5,556,820	$ 3,371,172
C&I	$ 2,050,000	$ 2,350,000	$ 4,555,751	$ 2,350,000
Other	$ 305,500	$ 355,500	$ 533,250	$ 355,500
TOTAL	**$ 5,276,672**	**$ 6,076,672**	**$ 10,645,821**	**$ 6,076,672**

Note 1 - 2011 Budget does not reflect July 2011 PURA approval of $1.0 million increased funding for CNG Residential programs.
Note 2 - 2011 Budget does not include PURA approved projects that are over $100K in customer incentive payments.

CNG 2012 Budget Analysis



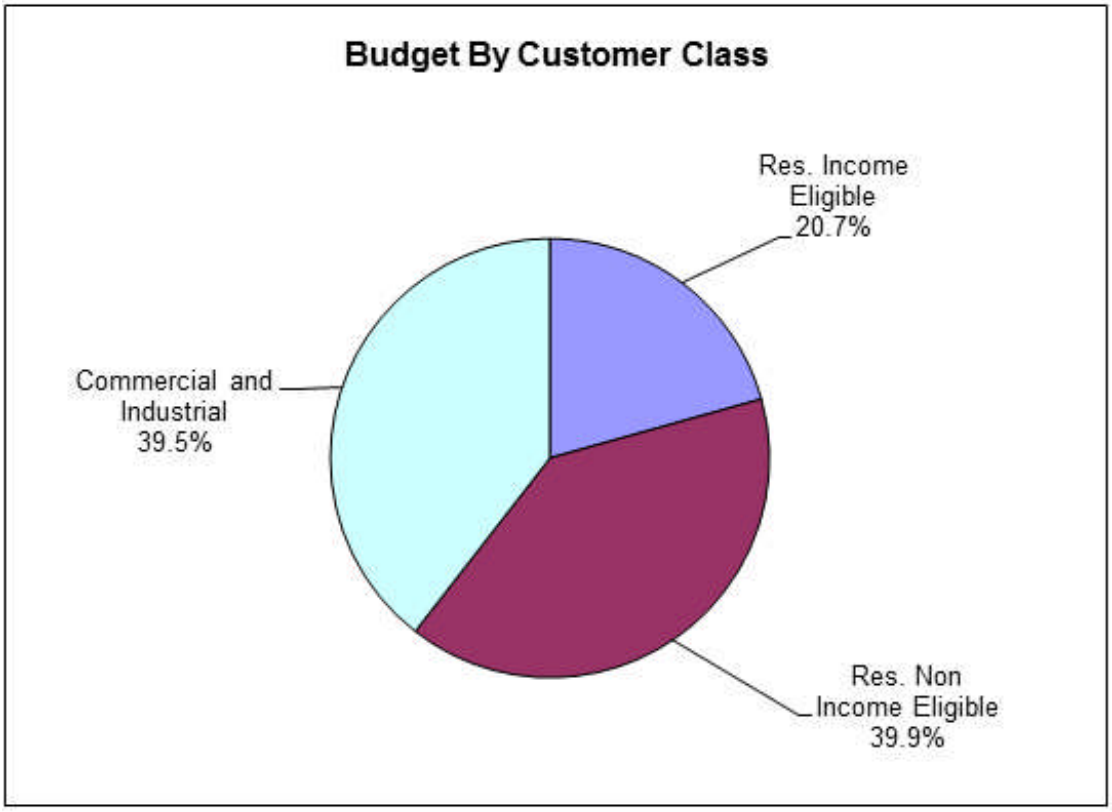
Customer Class	Budget	% of Total Conservation Budget	% of Residential & C&I Budget
Res. Income Eligible	$1,025,772	16.88%	18.55%
Res. Non Income Eligible	$2,205,400	36.29%	39.87%
Residential Subtotal	$3,231,172	53.17%	58.42%
Commercial and Industrial	$2,300,000	37.85%	41.58%
C&I Subtotal	$2,300,000	37.85%	41.58%
Residential and C&I Subtotal	$5,531,172	91.02%	100.00%
Other Expenditures			
Other Expenditures	$545,500	8.98%	
Other Expenditures Subtotal	$545,500	8.98%	
TOTAL	**$6,076,672**	100.00%	

Table A
SCG
Proposed Natural Gas Conservation Plan Budget

Natural Gas C&LM Budget	2011 SCG Filed Budget	2012 SCG Proposed Budget	2012 SCG Proposed Increased Savings	2013 SCG Proposed Budget
RESIDENTIAL				
HES Income Eligible - Weatherization	$ 900,000	$ 1,100,000	$ 2,317,498	$ 1,100,000
HES Income Eligible - Audits	$ 25,803	$ 25,803	$ 25,803	$ 25,803
HES Income Eligible - Total	**$ 925,803**	**$ 1,125,803**	**$ 2,343,301**	**$ 1,125,803**
Home Energy Solutions (HES)	$ 1,500,000	$ 1,824,790	$ 3,093,661	$ 1,824,790
Residential New Construction	$ 300,000	$ 300,000	$ 300,000	$ 300,000
Water Heating	$ 121,000	$ 46,210	$ 46,211	$ 46,210
Subtotal Residential	**$ 2,846,803**	**$ 3,296,803**	**$ 5,783,173**	**$ 3,296,803**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 1,050,000	$ 1,150,000	$ 2,080,462	$ 1,150,000
Total - Lost Opportunity	**$ 1,050,000**	**$ 1,150,000**	**$ 2,080,462**	**$ 1,150,000**
C&I LARGE RETROFIT				
Energy Opportunities	$ 700,000	$ 800,000	$ 1,457,286	$ 800,000
O&M (RetroCx, Training)	$ 100,000	$ 100,000	$ 184,050	$ 100,000
Total - C&I Large Retrofit	**$ 800,000**	**$ 900,000**	**$ 1,641,336**	**$ 900,000**
Small Business	$ -	$ 100,000	$ 187,763	$ 100,000
Subtotal C&I	**$ 1,850,000**	**$ 2,150,000**	**$ 3,909,561**	**$ 2,150,000**
OTHER - PROGRAMS/REQUIREMENTS				
CHIF Loan Fund	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Residential Financing Subsidies	$ 90,000	$ 90,000	$ 135,000	$ 90,000
C&I Financing Subsidies	$ 50,000	$ 50,000	$ 75,000	$ 50,000
Subtotal Programs/Requirements	**$ 190,000**	**$ 190,000**	**$ 285,000**	**$ 190,000**
OTHER - ADMINISTRATIVE & PLANNING				
Information Technology	$ 30,000	$ 30,000	$ 45,000	$ 30,000
Planning	$ 51,000	$ 51,000	$ 76,500	$ 51,000
Evaluation	$ 208,000	$ 258,000	$ 387,000	$ 258,000
Energy Efficiency Board	$ 16,500	$ 16,500	$ 24,750	$ 16,500
Subtotal Other - Administrative & Planning	**$ 305,500**	**$ 355,500**	**$ 533,250**	**$ 355,500**
PROGRAM SUBTOTALS				
Residential	$ 2,986,803	$ 3,436,803	$ 5,993,173	$ 3,436,803
C&I	$ 1,900,000	$ 2,200,000	$ 3,984,561	$ 2,200,000
Other	$ 305,500	$ 355,500	$ 533,250	$ 355,500
TOTAL	**$ 5,192,303**	**$ 5,992,303**	**$ 10,510,984**	**$ 5,992,303**

Note 1 - 2011 Budget does not reflect SCG request of PURA approval of $350K increased funding for SCG Residential programs.
Note 2 - 2011 Budget does not include PURA approved projects that are over $100K in customer incentive payments.

SCG 2012 Budget Analysis



Customer Class	Budget	% of Total Conservation Budget	% of Residential & C&I Budget
Res. Income Eligible	$1,125,803	18.79%	20.67%
Res. Non Income Eligible	$2,171,000	36.23%	39.86%
Residential Subtotal	$3,296,803	55.02%	60.53%
Commercial and Industrial	$2,150,000	35.88%	39.47%
C&I Subtotal	$2,150,000	35.88%	39.47%
Residential and C&I Subtotal	$5,446,803	90.90%	100.00%
Other Expenditures			
Other Expenditures	$545,500	9.10%	
Other Expenditures Subtotal	$545,500	9.10%	
TOTAL	**$5,992,303**	100.00%	

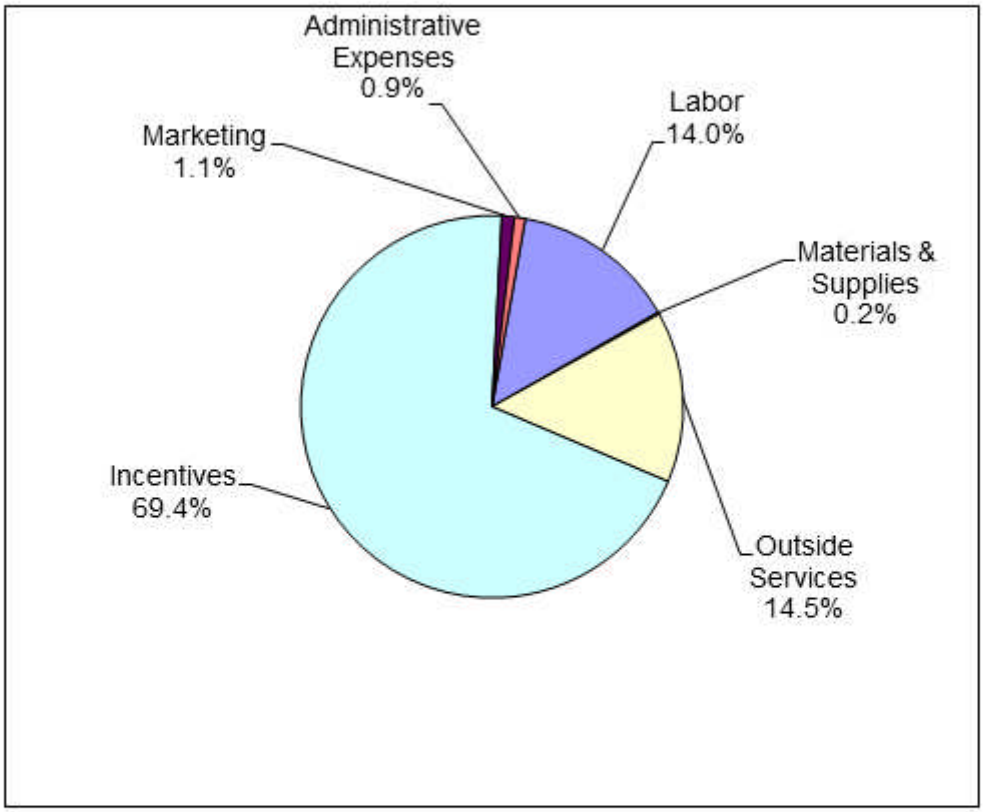
Table C
YGS 2012 Budget Details

GAS CONSERVATION BUDGET ($000)	Labor	Materials & Supplies	Outside Services	Incentives	Marketing	Administrative Expenses	TOTAL
RESIDENTIAL							
HES Income Eligible - Weatherization	$ 175,500	$ 2,500	$ 90,000	$ 892,000	$ 7,500	$ 2,500	$ 1,170,000
HES Income Eligible - Audits			$ 30,000				$ 30,000
HES Income Eligible Total	**$ 175,500**	**$ 2,500**	**$ 120,000**	**$ 892,000**	**$ 7,500**	**$ 2,500**	**$ 1,200,000**
Home Energy Solutions (HES)	$ 285,600	$ 5,000	$ 156,874	$ 1,428,366	$ 20,000	$ 8,160	$ 1,904,000
Residential New Construction	$ 34,580	$ 1,625	$ 6,150	$ 442,145	$ 11,500	$ 4,000	$ 500,000
Water Heating	$ 3,500	$ 256	$ 4,100	$ 56,917	$ 4,207	$ 1,020	$ 70,000
Subtotal Residential	**$ 499,180**	**$ 9,381**	**$ 287,124**	**$ 2,819,429**	**$ 43,207**	**$ 15,680**	**$ 3,674,000**
COMMERCIAL & INDUSTRIAL LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 212,800	$ 1,681	$ 138,232	$ 1,090,672	$ 16,783	$ 19,832	$ 1,480,000
Subtotal C&I - Lost Opportunity	**$ 212,800**	**$ 1,681**	**$ 138,232**	**$ 1,090,672**	**$ 16,783**	**$ 19,832**	**$ 1,480,000**
COMMERCIAL & INDUSTRIAL LARGE RETROFIT							
Energy Opportunities	$ 107,730	$ 1,159	$ 95,268	$ 790,608	$ 11,567	$ 13,668	$ 1,020,000
Operations & Maintenance	$ 65,170	$ 500	$ 5,500	$ 125,930	$ 2,600	$ 300	$ 200,000
Subtotal C&I - Lost Opportunity	**$ 172,900**	**$ 1,659**	**$ 100,768**	**$ 916,538**	**$ 14,167**	**$ 13,968**	**$ 1,220,000**
Small Business	$ 10,660	$ 140	$ 1,680	$ 71,900	$ 1,000	$ 14,620	$ 100,000
Subtotal C&I	**$ 396,360**	**$ 3,480**	**$ 240,680**	**$ 2,079,110**	**$ 31,950**	**$ 48,420**	**$ 2,800,000**
OTHER - PROGRAMS/REQUIREMENTS & PLANNING							
CHIF Loan Fund			$ 50,000				$ 50,000
Residential Financing Subsidies			$ 90,000				$ 90,000
C&I Financing Subsidies			$ 50,000				$ 50,000
Information Technology			$ 35,000				$ 35,000
Planning	$ 59,000		$ -				$ 59,000
Evaluation	$ 31,920		$ 252,080				$ 284,000
Energy Efficiency Board			$ 16,500				$ 16,500
Subtotal Other	**$ 90,920**	**$ -**	**$ 493,580**	**$ -**	**$ -**	**$ -**	**$ 584,500**
PROGRAM SUBTOTALS							
Residential	$ 499,180	$ 9,381	$ 427,124	$ 2,819,429	$ 43,207	$ 15,680	**$ 3,814,000**
C&I	$ 396,360	$ 3,480	$ 290,680	$ 2,079,110	$ 31,950	$ 48,420	**$ 2,850,000**
Other	$ 90,920	$ -	$ 303,580	$ -	$ -	$ -	**$ 394,500**
TOTAL BUDGET	**$ 986,460**	**$ 12,861**	**$ 1,021,384**	**$ 4,898,539**	**$ 75,157**	**$ 64,100**	**$ 7,058,500**

YGS

2012 Gas Conservation

Budget By Expense Class



Expense Classes		Budget	% of Budget
Labor	$	986,460	14.0%
Materials & Supplies	$	12,861	0.2%
Outside Services	$	1,021,384	14.5%
Incentives	$	4,898,539	69.4%
Marketing	$	75,157	1.1%
Administrative Expenses	$	64,100	0.9%
Total	**$**	**7,058,500**	**100.00%**

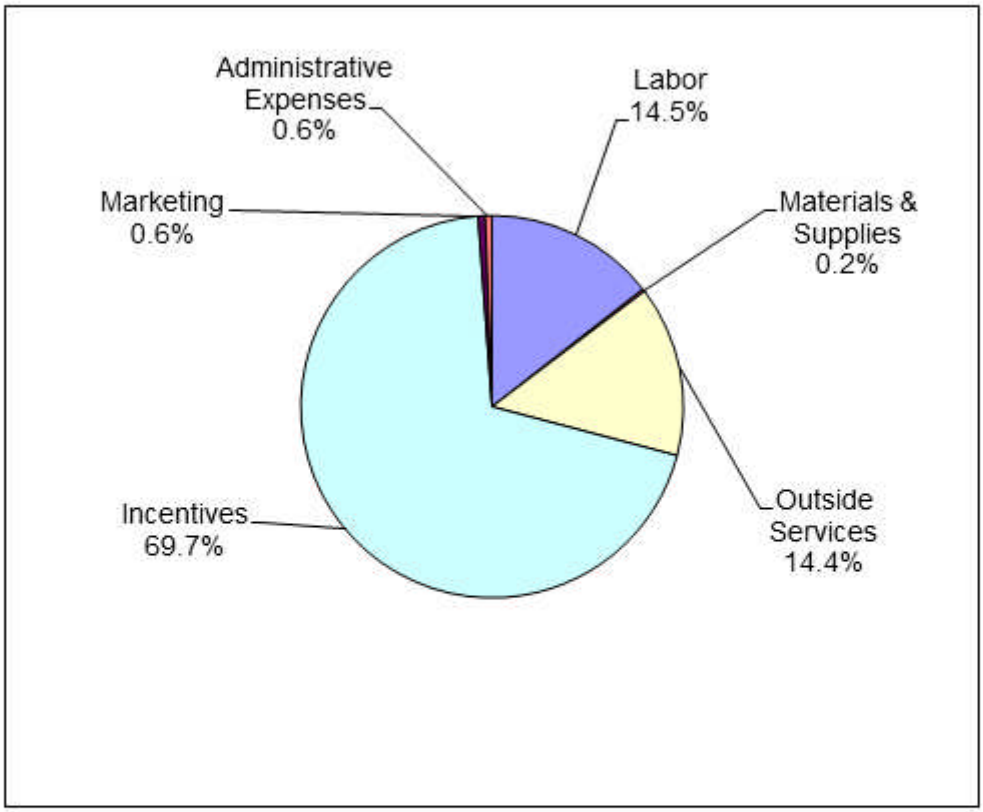
Table C
CNG 2012 Budget Details

GAS CONSERVATION BUDGET ($000)	Labor	Materials & Supplies	Outside Services	Incentives	Marketing	Administrative Expenses	TOTAL
RESIDENTIAL							
HES Income Eligible - Weatherization	$ 168,744	$ 3,500	$ 36,950	$ 785,606	$ 2,600	$ 2,600	$ 1,000,000
HES Income Eligible - Audits			$ 25,772				$ 25,772
HES Income Eligible Total	**$ 168,744**	**$ 3,500**	**$ 62,722**	**$ 785,606**	**$ 2,600**	**$ 2,600**	**$ 1,025,772**
Home Energy Solutions (HES)	$ 297,920	$ 5,040	$ 124,223	$ 1,368,054	$ 12,548	$ 7,560	$ 1,815,345
Residential New Construction	$ 33,250	$ 840	$ 53,305	$ 251,545	$ 8,260	$ 2,800	$ 350,000
Water Heating	$ 5,000	$ 500	$ 2,305	$ 23,800	$ 6,450	$ 2,000	$ 40,055
Subtotal Residential	**$ 504,914**	**$ 9,880**	**$ 242,555**	**$ 2,429,005**	**$ 29,858**	**$ 14,960**	**$ 3,231,172**
COMMERCIAL & INDUSTRIAL LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 150,290	$ 3,150	$ 107,507	$ 970,323	$ 3,060	$ 5,670	$ 1,240,000
Subtotal C&I - Lost Opportunity	**$ 150,290**	**$ 3,150**	**$ 107,507**	**$ 970,323**	**$ 3,060**	**$ 5,670**	**$ 1,240,000**
COMMERCIAL & INDUSTRIAL LARGE RETROFIT							
Energy Opportunities	$ 103,180	$ 198	$ 51,194	$ 698,948	$ 1,980	$ 4,500	$ 860,000
Operations & Maintenance	$ 33,180	$ 50	$ 5,000	$ 60,970	$ 300	$ 500	$ 100,000
Subtotal C&I - Lost Opportunity	**$ 136,360**	**$ 248**	**$ 56,194**	**$ 759,918**	**$ 2,280**	**$ 5,000**	**$ 960,000**
Small Business	$ 10,664	$ 135	$ 1,680	$ 76,901	$ 996	$ 9,624	$ 100,000
Subtotal C&I	**$ 297,314**	**$ 3,533**	**$ 165,381**	**$ 1,807,142**	**$ 6,336**	**$ 20,294**	**$ 2,300,000**
OTHER - PROGRAMS/REQUIREMENTS & PLANNING							
CHIF Loan Fund			$ 50,000				$ 50,000
Residential Financing Subsidies			$ 90,000				$ 90,000
C&I Financing Subsidies			$ 50,000				$ 50,000
Information Technology			$ 30,000				$ 30,000
Planning	$ 51,000						$ 51,000
Evaluation	$ 25,270		$ 232,730				$ 258,000
Energy Efficiency Board			$ 16,500				$ 16,500
Subtotal Other	**$ 76,270**	**$ -**	**$ 469,230**	**$ -**	**$ -**	**$ -**	**$ 545,500**
PROGRAM SUBTOTALS							
Residential	$ 504,914	$ 9,880	$ 382,555	$ 2,429,005	$ 29,858	$ 14,960	**$ 3,371,172**
C&I	$ 297,314	$ 3,533	$ 215,381	$ 1,807,142	$ 6,336	$ 20,294	**$ 2,350,000**
Other	$ 76,270	$ -	$ 279,230	$ -	$ -	$ -	**$ 355,500**
TOTAL BUDGET	**$ 878,498**	**$ 13,413**	**$ 877,166**	**$ 4,236,147**	**$ 36,194**	**$ 35,254**	**$ 6,076,672**

CNG

2012 Gas Conservation

Budget By Expense Class



Expense Classes		Budget	% of Budget
Labor	$	878,498	14.5%
Materials & Supplies	$	13,413	0.2%
Outside Services	$	877,166	14.4%
Incentives	$	4,236,147	69.7%
Marketing	$	36,194	0.6%
Administrative Expenses	$	35,254	0.6%
Total	**$**	**6,076,672**	**100.00%**

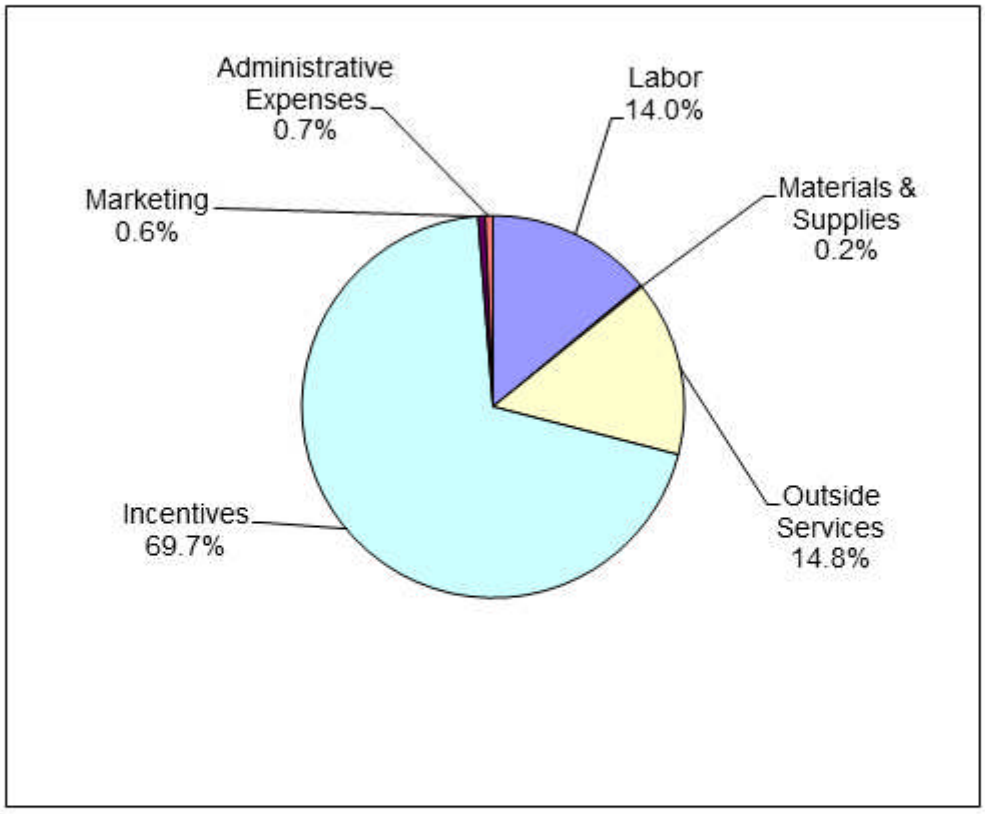
Table C
SCG 2012 Budget Details

GAS CONSERVATION BUDGET ($000)	Labor	Materials & Supplies	Outside Services	Incentives	Marketing	Administrative Expenses	TOTAL
RESIDENTIAL							
HES Income Eligible - Weatherization	$ 164,994	$ 3,960	$ 37,950	$ 887,156	$ 2,970	$ 2,970	$ 1,100,000
HES Income Eligible - Audits			$ 25,803				$ 25,803
HES Income Eligible Total	**$ 164,994**	**$ 3,960**	**$ 63,753**	**$ 887,156**	**$ 2,970**	**$ 2,970**	**$ 1,125,803**
Home Energy Solutions (HES)	$ 297,920	$ 5,040	$ 124,852	$ 1,376,870	$ 12,548	$ 7,560	$ 1,824,790
Residential New Construction	$ 33,250	$ 720	$ 45,690	$ 210,860	$ 7,080	$ 2,400	$ 300,000
Water Heating	$ 5,000	$ 496	$ 2,638	$ 28,600	$ 7,477	$ 2,000	$ 46,210
Subtotal Residential	**$ 501,164**	**$ 10,216**	**$ 236,933**	**$ 2,503,486**	**$ 30,074**	**$ 14,930**	**$ 3,296,802**
COMMERCIAL & INDUSTRIAL LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 145,290	$ 324	$ 106,844	$ 887,651	$ 3,213	$ 6,678	$ 1,150,000
Subtotal C&I - Lost Opportunity	**$ 145,290**	**$ 324**	**$ 106,844**	**$ 887,651**	**$ 3,213**	**$ 6,678**	**$ 1,150,000**
COMMERCIAL & INDUSTRIAL LARGE RETROFIT							
Energy Opportunities	$ 81,820	$ 228	$ 63,783	$ 645,133	$ 2,256	$ 6,780	$ 800,000
Operations & Maintenance	$ 25,180	$ 100	$ 10,000	$ 63,220	$ 500	$ 1,000	$ 100,000
Subtotal C&I - Lost Opportunity	**$ 107,000**	**$ 328**	**$ 73,783**	**$ 708,353**	**$ 2,756**	**$ 7,780**	**$ 900,000**
Small Business	$ 10,664	$ 135	$ 1,680	$ 76,901	$ 996	$ 9,624	$ 100,000
Subtotal C&I	**$ 262,954**	**$ 787**	**$ 182,307**	**$ 1,672,905**	**$ 6,965**	**$ 24,082**	**$ 2,150,000**
OTHER - PROGRAMS/REQUIREMENTS & PLANNING							
CHIF Loan Fund			$ 50,000				$ 50,000
Residential Financing Subsidies			$ 90,000				$ 90,000
C&I Financing Subsidies			$ 50,000				$ 50,000
Information Technology			$ 30,000				$ 30,000
Planning	$ 51,000		$ -				$ 51,000
Evaluation	$ 25,270		$ 232,730				$ 258,000
Energy Efficiency Board			$ 16,500				$ 16,500
Subtotal Other	**$ 76,270**	**$ -**	**$ 469,230**	**$ -**	**$ -**	**$ -**	**$ 545,500**
PROGRAM SUBTOTALS							
Residential	$ 501,164	$ 10,216	$ 376,933	$ 2,503,486	$ 30,074	$ 14,930	**$ 3,436,802**
C&I	$ 262,954	$ 787	$ 232,307	$ 1,672,905	$ 6,965	$ 24,082	**$ 2,200,000**
Other	$ 76,270	$ -	$ 279,230	$ -	$ -	$ -	**$ 355,500**
TOTAL BUDGET	**$ 840,388**	**$ 11,004**	**$ 888,470**	**$ 4,176,390**	**$ 37,039**	**$ 39,012**	**$ 5,992,302**

SCG

2012 Gas Conservation

Budget By Expense Class



Expense Classes		Budget	% of Budget
Labor	$	840,388	14.0%
Materials & Supplies	$	11,004	0.2%
Outside Services	$	888,470	14.8%
Incentives	$	4,176,390	69.7%
Marketing	$	37,039	0.6%
Administrative Expenses	$	39,012	0.7%
Total	**$**	**5,992,302**	**100.00%**

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CHAPTER TWO: RESIDENTIAL PROGRAMS

Residential Overview (Electric and Natural Gas)

The Residential Subcommittee of the EEB, established in 2010, is comprised of EEB consultants, vendor and industry partners, representatives of the Companies and representatives of various Connecticut agencies. The subcommittee works together to promote and institute strategies that support both market transformation and market-based residential program initiatives.

The overall purpose of the Energy Efficiency Fund's Residential programs is to provide cost-effective in-home services and retail product incentives that allow Connecticut's households to save energy and money without sacrificing comfort or convenience. These nationally recognized programs will support the evolution of a sustainable energy climate in Connecticut through the design and implementation of comprehensive, whole-home solutions.

Consistent with this purpose, the residential programs continue to evolve through the addition of measures that exploit emerging technologies in lighting, heating and cooling, along with utilizing innovative financing and new ways to communicate and foster behavior changes. The overarching effect of these programs and services will be households with smaller carbon footprints and lower utility bills.

In 2012, the key themes of the residential programs include:

- Deep and meaningful savings goals (20-25%) that will have a real impact on individual residential energy bills and carbon footprints, and an aggregate energy-systems benefit that will contribute to the state's overall energy goals.
- Increased residential awareness of the value and benefits of weatherization.
- Increased incremental energy savings through high performance and ENERGY STAR Homes, HVAC system upgrades, and measures identified through advanced diagnostics
- Supporting customers in making energy management an integral part of their home practices and lifestyles through use of behavioral change tools and techniques including outreach, education and social networking.
- Innovative financing (as detailed in this Chapter and in Chapter 5).

Home Energy Solutions [SM]

Home Energy Solutions (HES) is the residential portfolio flagship program. The HES Program began in 2006 as a residential duct sealing pilot. Since that time, it's grown to a multi-million dollar retrofit program with 26 vendors delivering "Core Services" to customers throughout Connecticut. In 2011, the Companies' limited income programs (UI Helps and WRAP) were merged under the existing HES

umbrella, allowing the Companies to market a single program to all eligible customers. The former WRAP and UI Helps programs' are now named Home Energy Solutions-Income Eligible (HES-IE). This change provides more consistency in weatherization practices, vendor training and creates a seamless brand identity for residential customers.

The HES program is moving towards a market-based approach. In five short years HES has significantly expanded the residential energy efficiency services sector in Connecticut contracting with 26 vendors who employ more than 200 technicians. The HES program generates customer leads and potential sales for HVAC dealers, fuel oil dealers, insulation, home improvement contractors and many other companies that provide additional energy efficiency products and services to customers after their initial HES service call. Connecticut has the highest per capita contractor base certified and trained in Building Performance Institute (BPI), as Building Analyst, Envelope and/or Multi-family specialist in the United States.

In coordination with the EEB and PURA, the Companies have made a number of recent enhancements to improve the delivery and quality of HES services:

- Established a standard co-payment for electric and natural gas customers allowing the program to maintain steady customer participation.
- Created and enhanced the standardized HES Summary Assessment Report that each program participant receives.
- In 2011, HES gained recognition from the US EPA establishing Connecticut as a Home Performance with ENERGY STAR state. Home Performance with ENERGY STAR allows contractors to provide HES core services and then create a scope of work for additional measures that will be eligible for incentives and financing.
- Established a low interest financing program with on-bill repayment (Details in Chapter 5).
- Enhanced vendor quality control and assurance protocols.
- Enhanced technician certification and trainings for the following:
    - Building Performance Institute - Building Analyst 1 certification
    - Building Performance Institute - Envelope Specialist certification
    - Building Performance Institute - Multi-Family Specialist
    - Home Improvement Contractor with Dept. of Consumer Protection

HES program administrators are also working towards the accomplishment of new program enhancements, including the following:

- Establishing a licensing requirement for Home Energy Assessment professionals by 2012. Throughout 2012, the Companies will work with the appropriate regulatory agencies and the

legislature to establish this license. The license will allow the industry to police itself and will help ensure high quality service and increased customer satisfaction.

- Review and evaluation of new field monitoring tools that demonstrate to customers the value and benefits of additional energy efficiency measures (i.e., payback, tax credits, financing, etc.)
- Improve the kitchen table wrap up session by replacing the toolbox kit with the Print on Demand (POD) kit and implementing the Home Energy Yardstick Tool (HEY). Furnishing the POD allows vendors to have more meaningful and effective conversations about the services provided to the customer and leave behind only applicable add-on measures information to customer. The POD will help improve the program goals of selling and tracking of add-on measures, while providing substantial information to customers about their home efficiency improvements.

  Implementing the full version of the HEY tool, should encourage customers to look at the potential for deeper savings opportunity measures, which benefit the customers overall home efficiency, utility consumption and carbon footprint.
- Continue improvement and enhancement of existing data tools that will allow tracking of program and vendor performance by focusing on key metrics and guiding program changes and enhancements.
- During 2012 the Companies' will ensure that both 3rd party vendors and Community Action Agencies will follow the same technical and quality assurance protocols of their HES colleagues.
- Low-cost capital to offer low-interest financing for fuel oil heating customers.

The Companies are continuing to look to ways to transform the HES market. This effort to transform the market must be gradual to assure proper vendor training and delivery of services and to assure customer satisfaction and energy savings. The transformation process will likely involve many steps, working in conjunction with EEB to ensure that the process is thorough and complete.

One of the core focuses and challenges of 2012 will be to squeeze additional electric and natural gas savings from both the core services and add-on measures. The Companies look toward a performance metric of ten (10) percent increase savings and twenty-five (25) percent savings in the increase savings scenario. In order to achieve such savings, the Companies will need to insist upon deeper measure penetration in homes by the vendor base. The Companies and the vendors will need to better prescreen HES customers for potential savings and educate participants that the core services of HES are just the beginning and that additional "add-on" measures are available.

In 2012, the Electric and Natural Gas Companies' will continue to offer residential customers a variety of nationally recognized in-home services and rebates to help them save energy and money, while improving comfort levels for occupants. The residential programs are constantly assessed, modified and reviewed to exceed standard practice, respond to customer needs and to ensure cost-effectiveness.

Home Energy Solutions Fuel Oil Funding

ARRA dollars and electric fund allocations from RGGI and PA 11-80 have allowed fuel oil heated homes to pay the same low co-pay (currently $75 for HES, no charge for HES-IE) as electric and natural gas heated homes. Once that funding is exhausted, serving fuel oil heated customers while passing the utility cost test will be a challenge. Without a fuel oil funding mechanism, such as a penny-a-gallon assessment on home heating oil, which would generate approximately $6 million annually, maintaining a $75 co-pay for fuel oil heated homes would require drastically abridged services to those customers in order to be cost-effective. This could have the effect of essentially locking 50 percent or more of Connecticut residents out of many of the direct-install services enjoyed by the rest of the residents of the State.

Alternatively, without oil funding fuel oil customers would need to pay in excess of $500 to receive the full breadth of core services – an effective barrier to participation. An additional or complementary way to address this challenge would be to utilize a cost-effectiveness test that counts all energy benefits, not just electricity, when measuring the cost-effectiveness of the program, allowing the Companies to claim both electric and non-electric benefits when calculating cost effectiveness. However, this would still be limited by the $500,000 cap established in PA 11-80.

Heat Pump Water Heaters

In 2011, the Energy Efficiency Fund began offering eligible customers a $400 rebate for Heat Pump Water Heaters (HPWHs). This rebate will continue to be offered through HES and, where appropriate, in HES-IE. The Companies are cognizant of potential issues that may arise if units are not installed properly and plan on working with industry professionals to ensure that installation standards are followed. In addition, the Companies are working with a group of national stakeholders to develop standards that reflect colder climate installations. An increase in promoting HPWHs available through big-box retail channels will be pursued as a number of large retailers carry and sell HPWHs.

Residential Retail Products Program

Although use of the common compact fluorescent light bulb ("CFL") has become more acceptable by residential consumers and is widely available through various retail channels, the 2009 evaluation conducted by the EEB, "The Market for CFLs in Connecticut" showed socket saturation of CFLs was around twenty-three (23) percent, and over thirty-four (34) percent of households in Connecticut completely lack CFLs. In 2011, the Companies increased their efforts to promote common CFLs, in addition to the push for specialty CFLs started in 2009 and 2010. The EEB will conduct another socket saturation study of CFLs to see what impact the efforts of the 2010 and 2011 Retail Products Program have had on achieving the mandated socket penetration rate of thirty-six (36) percent.

Additionally, the Energy Independence and Security Act ("EISA") of 2007 will phase out certain standard use incandescent bulbs beginning in 2012. However, as the lighting market continues to develop in

response to EISA 2007, it is not anticipated that there will be a complete phase-out of incandescent bulbs or that CFLs will become the baseline. Several large manufacturers already have full lines of EISA compliant halogen products on the shelves of U.S. retail stores. These halogen bulbs are approximately twenty-five (25) percent more efficient than current incandescent bulbs, while CFL technology is approximately seventy-five (75) percent more efficient than current incandescent bulbs. Lighting efficacy is commonly measured by a ratio known as lumens per watt. There are also indications that the industry's response to EISA; e.g., producing lower lumen halogens to meet the standard, may result in even smaller savings than anticipated, leaving greater savings potential from CFLs. Therefore, it appears that there will be the need to continue aggressive promotion of CFL technology through and past the phase-in of EISA 2007.

In 2011, the Companies began to offer upstream incentives for LEDs in a handful of retailers. In 2012 the Companies plan on increasing the number of LEDs under negotiated cooperative promotions (NCPs) to educate customers on the benefits and availability of LEDs at numerous retailer outlets across the State. The benefits of LEDs compared to more traditional light sources include high efficiency (higher lumens per watt), relatively small size and configuration, and very long lifetimes.

With new LED products and the adoption of EISA 2007, the need to educate and guide consumers to choose appropriate energy efficient lighting, as well as educating customers on lumen output will be an important focus in 2012.

ENERGY STAR's "Most Efficient" and the "TopTenUSA" initiative identify and make available to consumers the best of the best in energy saving appliances (clothes washers, refrigerators, freezers, and dishwashers), heating and cooling equipment, and consumer electronics (televisions, computers and monitors). These initiatives provide an opportunity to educate consumers on the most efficient products on the market, as well as offer promotions on these product categories on a case-by-case basis. The Retail Products program will be looking for promotional opportunities with these new ENERGY STAR initiatives.

The Companies will explore the feasibility of developing higher state efficiency codes and/or standards for various products, including boilers, television set top boxes, hot tubs, pool heaters, and electronics products.

Residential New Construction Program ("RNC")

RNC will phase in the new ENERGY STAR version 3.0 requirements. The Companies began the impending transition in 2011 with ENERGY STAR 2.5 requirements leading to ENERGY STAR 3.0 requirements by 2012. All projects must meet these standards in order to receive the ENERGY STAR label and recognition. The new ENERGY STAR requirements include additional thermal enclosure system requirements, thermal bridging criteria and water management systems. These requirements represent a significant increase in building science requirements and increase the differentiation between an ENERGY STAR and "standard" new home in energy efficiency and durability performance.

The CT Zero Energy Challenge will continue in 2012, but since low-load home construction has proven to be a viable building practice, it will now become an integral part of the RNC program through the addition of a new incentive track called Low Load Homes.

With homeowners extremely aware of the monthly expenses necessary to operate their home, a marketing campaign, tentatively called ENERGY STAR: New Home, No Bill, will be explored to offer an exciting way for homebuyers to see the value of an ENERGY STAR Home as soon as they move in. This would offer the homeowner the opportunity to move into a new ENERGY STAR home without having to pay an electric bill for the first year, while also receiving educational tips on how to save energy.

The Companies will also work with local building officials and builders to help prepare the market for the expected transition to the 2009 International Energy Efficiency Code ("2009 IECC"), which is expected to be adopted mid-2012. The Companies are prepared to continue to support the impending code change to IECC 2012 in 2013. These requirements to comply with the code will be factored into the program criteria before 2012, thus preparing the building sector for additional code changes with IECC 2012.

Financing

The Companies ran a Residential Financing Pilot program from June 1, 2010 through May 31, 2011. The pilot program offered loans at attractive, below-market interest rates. The pilot also allowed the Companies to engage customers and contractors in a new way by reducing barriers to deeper energy efficiency. The Residential Financing Pilot program successfully funded loans to over 1,250 customers representing over $14.5 million in energy efficient home improvements.

Although the pilot was successful, the cost to the Fund for interest rate buy downs was high due to the capital source used by the third party financing vendor. The Companies, in conjunction with the EEB, sought alternative financing models to reduce the cost to the Fund. On June 1, 2011 the Companies introduced a new residential loan program by offering subsidized, low interest rate loans with on-bill repayment to HES residential customers who make qualified energy efficiency improvements to their homes. The new loan program will cost the Fund less since the pilot program source of capital (Fannie Mae at 14.99 percent) was replaced with less expensive funds (shareholder capital and/or $6 million of 2010 unspent energy efficiency funds). This program will be one of the first in the nation to offer on-bill repayment of energy efficiency measures for residential customers.

The Companies will continue to seek options to lower the cost of capital to offer low-interest financing for oil heating customers. (See Chapter 5 for more details.)

Residential Retail Products (Electric)

Objective:

The objective of the Residential Retail Products program is to increase awareness, consumer acceptance and market share of ENERGY STAR® lighting, appliances and electronics. In particular, the 2012 Retail Products Program will focus on increasing socket penetration of efficient lighting products in homes including solid state lighting (SSLs), also referred to as light emitting diodes (LEDs).

The Residential Retail Products program to date has been the model market transformation program within the residential portfolio. At the program's inception financial incentives were paid directly to consumers via an instant and/or mail-in rebate. Today, incentives are paid primarily through an upstream model -- consumers pay the discounted price at the point of purchase -- thus reducing overall program expenses by eliminating redemption costs and simplifying the consumer's purchasing experience.

Target Market:

The Companies residential customers who purchase new lighting, appliances and electronics in retail market channels, participants of the Energy Efficiency Fund's other residential programs, non-profit organizations (through the Shining Solutions fundraising program), and residential remodeling channels.

Program Description:

For 2012, the primary focus of the Residential Retail Products program will be to continue to offer discounted lighting products to consumers at retail outlets throughout the state. For lighting, Negotiated Cooperative Promotions ("NCPs") have proven to be a useful approach in generating increased stocking and sales of lighting products at considerably lower cost than traditional coupons and rebates. Such promotions involve a partnership between the Companies and retailers/manufacturers that tie payment of incentives to the Companies' receipt of store-level sales data. Coupons and mail-in rebates can be utilized if NCPs are not brought under agreement or only on a temporary campaign-oriented basis.

In 2012, the Companies plan to continue partnering with both manufacturers and retailers to offer education and training regarding the benefits of energy-efficient products to local retail sales staff and consumers. In addition, the Companies will continue to work with retailers to strategically secure special retail placement of lighting products such as isle end-cap space in big box stores. This strategy proved to be effective at increasing sales of efficient lighting products. The Companies will continue to work collaboratively with manufacturers and retailers in the design and placement of point-of-purchase display collateral. "In-store promotions" will be pursued to assist retailers in promoting the program and to educate consumers on the positive benefits and quick payback provided by energy-efficient technologies.

The Companies also plan to continue implementing retail lighting sales events. At these events, the Companies' vendor offer lighting products for retail sale at community events, fairs, and large customer enterprises.

In the 4th Quarter of 2011, the Companies will launch a streamlined printed version of the SmartLiving™ Catalog, which will be distributed at outreach events and mailed to customers upon request. The focus of the catalog will be specialty CFL bulbs, as well as emerging Light Emitting Diode (LED) lighting products. In addition, the SmartLivingCatalog.com website will be updated and enhanced to feature additional lighting and weatherization products. The Catalog will be promoted via links from the Companies' web sites, CTEnergyInfo.com, and at lighting events.

In 2012, the Companies will not offer an "everyday" in-store rebate for appliances or electronics, as data shows ENERGY STAR rebates are often not a cost-effective strategy given rising baseline efficiencies. However, the Companies will consider limited NCP promotions with retailers and manufacturers (which may or may not include customer rebates) on a case-by-case basis as a means of maintaining a market presence. Promotions will be considered for specific time periods, such as Earth Day and to coincide with manufacturer, retailer, state or federal promotions that promote/target the highest tier efficiency within the product category.

The Companies will coordinate with NEEP to leverage the TopTen initiative. TopTen is part of a global effort first launched in Europe to identify the highest performing appliances, electronics, and other products. TopTen is a nonprofit organization that identified and publicizes the most energy efficient products on the market (www.TopTenUSA.org). TopTen is modeled after organizations located in 16 different European countries. The Companies will leverage TopTen to help raises awareness and provide information to customers on the most efficient products available in various product categories.

Additionally, the Companies will continue to offer CFL fundraising opportunities to schools and civic groups through "Shining Solutions." The fundraising program will encourage children between grades K-12 to be energy efficient and recognize the environmental consequences of wasting energy, i.e., global warming. The fundraising program will motivate children to promote responsibility for saving energy through the sale of CFLs and stimulate general awareness utilizing instructional kick-off presentations. The fundraising program is cross promoted to teachers/schools who participate in the ***eesmarts*** program and professional development workshops, as well as through the Clean Energy Communities program.

In 2012, the Companies plan on working with a group of national stakeholders to study the feasibility of developing efficient dryer technology to U.S. households through the Super Efficient Dryer Initiative (SEDI). Among the technologies being considered are heat pump dryers. Heat pump dryers are currently available in European and Asian markets. However, heat pump dryers have not yet been introduced domestically, are relatively expensive and their design is not aligned with the needs of the typical United States consumer (i.e., they are too small).

Marketing Strategy:

The marketing strategy for the Residential Retail Products program will continue to focus on building brand awareness of the unique benefits of energy-efficient products within the Companies' service territories. Specifically, the marketing of the program may include:

- Retail point-of-purchase materials to highlight the benefits of energy efficient products.
- The Companies will continue to seek out special retail placement opportunities including end-cap spaces and high traffic areas such as store entrances.
- Print, radio and on-line ads will promote CFL and LED products and will direct customers to look for the Energy Efficiency Fund logo when they purchase lighting products.
- Articles on the benefits of ENERGY STAR products will be placed in community and association newsletters (print and online).
- The SmartLiving Catalog will be distributed at events where the Companies are exhibiting such as home shows, community forums, fairs, Utility Days, etc.
- Cooperative opportunities with retailers and manufacturers will be leveraged to create general awareness of the ENERGY STAR brand, generate sales and extend the message into the community.
- Continued support of national and regional ENERGY STAR initiatives.
- Support of the TopTen USA initiative including a website portal that customers can access to seek information about energy savings and availability of the most efficient products at local retailers and online.
- Continued in 2012, consumer education addressing:
    - Federal Trade Commission Lighting Facts label
    - Proper lumen output and color selection technologies
    - Differences between LED, CFL, halogen and Incandescent lighting technologies
    - EISA 2007 lighting standard changes and the impact on the incandescent market.
- Cross-marketing opportunities with relevant statewide Fund programs such as Residential New Construction, ***eesmarts***, and Home Energy Solutions.

Incentive Strategy:

As the lighting and appliance markets both evolve, the Companies plan to define specific incentive amounts or strategies for the targeted products as the market dictates. In addition, the Companies will look to increase promotion of CFLs in those retail outlets where sales data has shown that sales trail those of big box retailers.

However, certain expectations and assumptions have been utilized for planning purposes, including:

2012 base rebate levels are:

- NCP incentives for ENERGY STAR-qualified CFL common and specialty bulbs vary by wattage and style.
- $10 per interior light fixture, portable lamp, or qualifying ceiling fan with light kits.
- NCP Incentives for ENERGY STAR-qualified LED products will be offered.
- Appliances and electronics incentives (if any) will be considered on a case-by-case basis and will be tied to the TopTen USA initiative.

Rebate levels for various products may be adjusted throughout the year to reflect market conditions including availability of product, consumer demand and program performance.

Goals:

Refer to standard filing requirement for program goals.

New Program Issues:

The Energy Independence and Security Act of 2007 (EISA 2007) could impact the availability of certain general service incandescent bulbs beginning in 2012. However, as the lighting market continues to develop in response to EISA 2007, it is not anticipated that there will be a complete phase-out of general service incandescent bulbs nor will CFLs become the baseline. Several large manufacturers already have full lines of EISA 2007 compliant halogen products on the shelves of US retail stores. These bulbs are approximately twenty-five (25) percent more efficient than standard incandescent bulbs, while CFLs remain approximately seventy-five (75) percent more efficient than the EISA complaint products. Further, there are indications that industries' response to EISA, e.g., producing lower lumen halogens to meet the standard, may result in even smaller savings than anticipated, leaving greater savings potential for CFLs. Therefore, it appears that there will be the need to continue aggressive promotion of CFL technology through and past the phase-in of EISA 2007.

The Companies in coordination with the EEB will host energy efficiency lighting focus groups in the 3rd Quarter of 2011 to gauge customers understanding of EISA 2007, the changes ahead for lighting retro-fits and customers' willingness to adopt new lighting technologies.

It will be important for the Companies to re-educate consumers as to the appropriate energy efficiency lighting source to utilize. The Companies will be challenged with not only educating consumers on lumen output, but more importantly on interpreting the recently released Federal Trade Commission (FTC) Lighting Labels. Consumer education will be an important aspect of the 2012 program as EISA 2007 introduces a new lighting world for consumers. EISA also presents the need to evaluate new lighting technologies that might be developed to meet the EISA requirements. To date we have seen

the more efficient halogen bulbs that do not provide customers with the energy savings compared to CFLs or LEDs, as well as the anticipated arrival of halogen 2x products which are twice as efficient as standard incandescent lighting products. Consumers will be receiving multiple messages regarding lighting and efficiency. The Companies will need to navigate through the manufacturer claims and educate consumers accordingly.

In July 2011, CFL Manufacturers announced that the cost of producing CFLs would increase due to a shortage in rare earth materials, specifically phosphor. Phosphor is a critical component in the production of CFLs (though CFLs are not the only technology affected) and had represented approximately 10-15 percent of the cost of a CFL. It may now exceed 50 percent of the total CFL production cost. Depending on the manufacturer, the retail cost for CFLs may increase between 10-25 percent. The increase will vary based on size and wattage of CFLs. It is anticipated that the retail price increase could take effect as soon as September 2011. The Companies will monitor the potential market impact and will adjust incentive strategies if the need should arise.

ENERGY STAR solid state (i.e., LED) lighting remains in its infancy in terms of consumer acceptance and overall retrofit product offering. The Companies will support their inclusion into the program based on availability and performance. There are limited ENERGY STAR-qualified LED products on the horizon that are suitable replacements for the standard A-type incandescent bulb, though there are a substantial number of qualified ENERGY STAR LED reflectors and flood lamps. The Companies will remain active in evaluating LED lighting technology and provide incentives on ENERGY STAR qualified products as they become available.

The Companies will continue to educate customers on the proper disposal of CFL bulbs. These strategies will include posting proper disposal information on Companies' websites and on point-of-purchase materials. In addition, the Companies have developed a CFL brochure which is available at lighting fairs, in-store promotions and used to educate customers through other programs such as the Home Energy Solutions programs.

The Energy Information Agency's Annual Energy Outlook 2006 projects that consumer electronics will account for nineteen (19) percent of residential energy use by 2020, compared with 14 percent of home energy consumption in 2006. The market for efficient electronic products has responded quickly to increased federal and ENERGY STAR standards. It is estimated that the majority of televisions sold in Connecticut already meet ENERGY STAR 4.2 criteria. Thus it appears that there may be limited savings potential within the television market. Despite this success, the Companies will continue to monitor and participate in the regional and national discussions around these technologies in coordination with CEE, NEEP and the EPA to piggy back on efforts that address the efficiency of consumer electronics. While most electronics manufacturers have responded quickly to higher efficiency standards, set-top boxes that are used in the cable and satellite TV industry have been lagging in terms of efficiency. The Companies will work with policymakers, including the PURA, to determine if higher standards for set-top boxes can be implemented in Connecticut.

In recent years, California has led the country in developing higher standards for various consumer electronic products. In 2011, the Companies have been active in working with local officials, regional and national organizations including the Consortium for Energy Efficiency and the Northeast Energy Efficiency Partnership, to help identify energy savings potential and to work to capture this opportunity for developing higher standards. Based upon working within these initiatives, the Companies may develop, where practical, a methodology to appropriately attribute energy savings from these efforts.

The following table provides the current federal standard, updated DOE standard and potential effective date, the ENERGY STAR current specification, the planned ENERGY STAR revision effective date and the state of Connecticut specification.

Category/Product	Current Federal Standard	Updated DOE Standard Due	Potential Effective Date	ENERGY STAR Current Spec	Planned ENERGY STAR Revision/New Spec (effective date)	State of CT Spec	Notes
Lighting Products - Residential:	**DOE transitioned specification responsibilities to EPA**						
Ceiling Fan Light Kits	N/A	2013	2016	(Sept 2006) At low speed, fans must have a minimum airflow of 1,250 CFM* and an efficiency of 155 CFM/Watt At high speed, fans must have a minimum airflow of 5,000 CFM* and an efficiency of 75 CFM/Watt	N/A	N/A	
Ceiling Fans	N/A	2013	2016	(Sept 2006) At low speed, fans must have a minimum airflow of 1,250 CFM* and an efficiency of 155 CFM/Watt At high speed, fans must have a minimum airflow of 5,000 CFM* and an efficiency of 75 CFM/Watt	N/A	N/A	
Decorative Light Strings	N/A			(March 2008) Products must meet efficiency (under 0.2W per bulb) and quality (3-year warranty, protection against over-voltage, maintained light output) requirements	N/A	N/A	
General Service Fluorescent Lamps		2013	2016	CFLs; 50-65 lm/W based on lamp wattage (December 2008)	ES recently launched tech neutral, perf based spec for replacement lamps	N/A	DOE Final Rule Due Date for next rev 2015 - Effective date 2018
General Service Incandescent Lamps		2017	2020	N/A	N/A	N/A	
Incandescent Reflector Lamps	EISA 2007 40-50 Nominal Lamp Wattage = 10.5 Lumens per Watt (LPW)	2017	2020	N/A	N/A	N/A	
	51-66 = 11.0 (LPW)						
	67-85 = 12.5 (LPW)						
	86-115 = 14.0 (LPW)						
	116-155 = 14.5 (LPW)						
	156-205 = 15.0 (LPW)						
Metal Halide Lamp Fixtures	Medium-Base Magnetic Probe Start – 78%	2012	2015				
	Medium-Base Pulse Start – 77%						
	Mogul-Base Magnetic Probe Start – 88%						
	Mogul-Base Magnetic Pulse Start – 85%						
	Mogul-Base Electronic Pulse Start – 87%						
	Ceramic Metal Halide – 75%						
Light Emitting Diodes	Fed St is ENERGY STAR	2017	2020	Integral LED; 50-55 lm/W based on lamp wattage (August 2010)	N/A	N/A	
Light Fixtures				August 2008 (CFL)/February 2009 (LED) >= 50 LPW for all lamp types below 30 total listed lamp watts. >= 60 LPW for all lamp types that are <= 24 inches and >= 30 total listed lamp watts. >= 70 LPW for all lamp types that are >= 24 inches and >= 30 total listed lamp watts.	April 2012	N/A	
Organic Light Emitting Diodes	LM-79/LM-80	2017	2020	N/A	N/A	N/A	

Category/Product	Current Federal Standard	Updated DOE Standard Due	Potential Effective Date	ENERGY STAR Current Spec	Planned ENERGY STAR Revision/New Spec (effective date)	State of CT Spec	Notes
Heating Products - Residential:							
Direct heating equipment	Gas hearth up to 20,000 Btu/ h AFUE* = 61%	2018	2023	N/A	N/A	N/A	
	Gas hearth over 20,000 Btu/ h and up to 27,000 Btu/h AFUE = 66%						
	Gas hearth over 27,000 Btu/ h and up to 46,000 Btu/h AFUE = 67%						
	Gas hearth over 46,000 Btu/ h AFUE = 68%						
Furnace Fans	N/A	2013	2016	N/A		N/A	
Furnaces	Gas AFUE 82% Oil AFUE 83%	2011	2013	(October 2006) Gas Furnaces 90% AFUE* or greater Oil Furnaces 85% AFUE or greater	N/A	N/A	
Mobile Home Furnace	Gas AFUE 81%			N/A	N/A	N/A	
Pool heaters (Gas Fired)	82% AFUE	2018	2021	N/A	N/A	1/1/09, partially pre-empted*	* Per federal legislation, states are pre-empted from establishing standards for pool heaters. However, states are permitted to prohibit standing pilot lights on pool heaters
Residential Boilers	Last Standard Issued 2007 Gas Hot Water Boilers = 82% AFUE Gas Steam Boilers = 80% AFUE Oil Hot Water = 84% AFUE Oil Steam = 82% AFUE	2015	2020	(June 1996) AFUE 85%	N/A	N/A	
Residential Water heaters	Electric - .95 EF Oil - .62 EF Gas - .62 EF Gas Tankless - .82 EF	2018	2023	(January 2009) Gas Condensing - .80 EF Gas Tankless - .82 EF Gas Storage - .67 EF Heat Pump Water Heater - 2.0 EF Solar - .05 SF	N/A	N/A	
Small Furnaces	Gas AFUE 82% Oil AFUE 83%			(October 2006) Gas Furnaces 90% AFUE* or greater Oil Furnaces 85% AFUE or greater	N/A	N/A	
Unit Heaters	8/1/2008	2013	2016	N/A	N/A	7/1/2006	

Category/Product	Current Federal Standard	Updated DOE Standard Due	Potential Effective Date	ENERGY STAR Current Spec	Planned ENERGY STAR Revision/New Spec (effective date)	State of CT Spec	Notes
Space Cooling Products - Residential:							
Central Air Conditioners and Central Air Conditioning Heat Pumps	August 2006 - Split system air conditioners 13 SEER Split system heat pumps 13 SEER 7.7 HSPF Single package heat pumps 13 SEER 7.7 HSPF Heat pumps-split system 10.9 SEER 7.1 HSPF	2011	2015	January 2009 - **Air-Source Heat Pumps** >= 8.2 HSPF/ >=14.5 SEER/ >=12 EER* for split systems >= 8.0 HSPF/ >=14 SEER/ >=11 EER* for single package equipment including gas/electric package units **Central Air Conditioners** >=14.5 SEER/ >=12 EER* for split systems >=14 SEER/ >=11 EER* for single package equipment including gas/electric package units	N/A		
Room Air Conditioners	http://www.energystar.gov/index.cfm?c=roomac.pr_crit_room_ac	2011	June 1, 2014	http://www.energystar.gov/index.cfm?c=romac.pr_crit_room_ac	N/A		Standards are complex. Please click link for full description of Fed St and ENERGY STAR guidelines.
Large Packaged Air Conditioning Equipment	1/1/2010					7/1/2009	
Appliances - Residential:							
Clothes dryers	Vented Electric, Standard (4.4 ft3 or greater capacity) - 3.73 lb/kWh	2011	January 1, 2015	N/A	N/A		
	Vented Electric, Compact (120 V) (less than 4.4 ft3 capacity) - 3.61 lb/kWh			N/A	N/A		
	Vented Electric, Compact (240 V) (less than 4.4 ft3 capacity) - 3.27 lb/kWh			N/A	N/A		
	Vented Gas - 3.30 lb/kWh			N/A	N/A		
	Ventless Electric, Compact (240 V) (less than 4.4 ft3 capacity) - 2.55 lb/kWh			N/A	N/A		
	Ventless Electric Combination Washer/Dryer - 2.08 lb/kWh			N/A	N/A		
Dehumidifiers	EISA 2007 Up to 35.00 (pints/day) = 1.35 (liters/kWh)	2015	2018	1.2 - 2.5 L/kWh (2006)	Update to spec in process - Nov 2010		
	35.01 □ 45.00 = 1.50						
	45.01 □ 54.00 = 1.60						
	54.01 □ 75.00 = 1.70						
	75.00 or more = 2.50						
Dishwashers	EISA 2007 Compact = 260 kwh/yr and 4.5 gal/cycle Standard = 355 kwh/yr and 6.5 gal/cycle	2015	2018	V4 Tier 1 - 324 kWh/yr, 5.6 WF (August 2009)	V5 Tier 1 - 295 kWh/yr, 4.25 gal/cycle (Jan 2012) Tier 2 TBD (Jan 2014)		
Kitchen ranges and ovens				N/A	N/A		
Microwave ovens				N/A	N/A		
Refrigerators, Freezers and Refrigerator-Freezers	http://www1.eere.energy.gov/buildings/appliance_standards/residential/pdfs/refrig_nopr_frnotice.pdf	2010	2014	20% better than Fed St	Revision launch TBA. Most Efficient Criteria 30% better than Fed St		Standards are complex. Please click link for full description of Fed Standard guidelines.
Clothes washers	MEF 1.26 and WF 9.5 or less	2011	2015	1.8 MEF / 7.5 WF (July 2009)	2.0 MEF / 6.0 WF (July 2011) Most Efficient Criteria <2.5 cub ft-2.3/4.5 >2.5 cub ft-3.0/3.3 (June, 2011)		
Room Air Cleaners and Purifiers	N/A			10% better than Fed St	15% better than Fed St - 1st draft proposal (Feb 2012)		

Category/Product	Current Federal Standard	Updated DOE Standard Due	Potential Effective Date	ENERGY STAR Current Spec	Planned ENERGY STAR Revision/New Spec (effective date)	State of CT Spec	Notes
Miscellaneous							
Gaming Consoles	N/A						
Audio/Video Equipment	N/A						
Battery Chargers	No efficiency standards currently exist for battery chargers. The federal standard will be lmiited to chargers connected to or embedded within consumer products.	2011	2013	Non-active Energy Ratio (January 2006)	Revision process ongoing (June 2011 for products currently uncovered. March 2012 for products covered)		
External Power Supplies, Class A	http://www1.eere.energy.gov/buildings/appliance_standards/residential/battery_external.html	2011	2013	Active mode equations no load mode and power factor (November 2008)	Specification being discont'd (Dec 31, 2010)	1/1/2008	Standards are complex. Please click link for full description of Fed Standard guidelines.
Computers	N/A			Version 5.0 (July 2009)	Kicking off next revision		
Cordless Phones	N/A			November 2008 http://www.energystar.gov/index.cfm?c=phones.pr_crit_phones	N/A		Standards are complex. Please click link for full description of ENERGY STAR guidelines.
Digital to Analog Converter Boxes	N/A			N/A	Specification being discont'd (Dec 31, 2010)		
Displays (computer monitors, digital picture frames, professional signage)	N/A			Version 5.0 (July 2009 for small screens <30 in.) (Jan 2010 for large screens >30 in.)	Scheduled revision (October 2011)		
Imaging Equipment (copiers, fax machines, printers, mailing machines, and scanners)	N/A			July 2009	N/A		Cannot find spec on ENERGY STAR site.
Set-Top Boxes and Cable Boxes	N/A			Version 2.0 - Typical Energy Consumption (TEC) limits (January 2009)	Version 3.0 (Sept, 2011) Version 4.0 (July 2013)		
Television sets	N/A	2013	2016	Version 4.1- Roughly CA Tier 2 (May, 2010)	Version 5.3- includes consumption cap for screens >50 in (September 30, 2011)(~50% of mkt) ES 6.0 revision launched in May (~20% of mkt). Most Efficient Criteria- 3 eqs. based on size 80 W max (June, 2011)		
Enterprise Servers	N/A						
Audio/Video Equipment	N/A						
Low voltage dry-type transformers	1/1/2007	2013	2016			7/1/2006	Pre-empted by Fed St
Commercial refrigerators and freezers	01/01/2010 - Walk-In Coolers - 16,200 (kWh/year)					7/1/2008	
	Walk-In Freezers - 21,400 (kWh/year)						
	Walk-In Freezer/Cooler Combination Units - 30,200 (kWh/year)						
Bottle-type water dispensers	N/A					1/1/2009	
Comm. hot food holding cabinets	N/A					1/1/2009	
Spas (hot tubs)	N/A					1/1/2009	
Swimming pool pumps	N/A					1/1/2010	

CL&P Standard Filing Requirement

Residential Retail Products (Lighting and Appliances)

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget		2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:									
NU Labor	$ 91	$ 116	$ 176		$ 55	$ 197	$ 144		$ 144
Contractor Staff	$ 0	$ 1	$ -		$ 0	$ -	$ 9		$ 9
Total Labor	$ 91	$ 116	$ 176		$ 55	$ 197	$ 153		$ 153
Materials & Supplies	$ 1	$ 1	$ 2		$ 0	$ 3	$ 2		$ 2
Outside Services	$ 770	$ 1,046	$ 1,053		$ 459	$ 1,186	$ 865	a)	$ 859
Incentives	$ 2,220	$ 10,429	$ 4,163	d)	$ 3,206	$ 4,678	$ 3,180	b)	$ 3,159
Marketing	$ 95	$ 770	$ 689		$ 83	$ 774	$ 600	c)	$ 596
Administrative Expenses	$ 4	$ 7	$ 20		$ 2	$ 22	$ 20		$ 20
Other	$ 41	$ 11	$ 30		$ 24	$ 34	$ 30		$ 30
Total	$ 3,224	$ 12,380	$ 6,133		$ 3,829	$ 6,896	$ 4,850		$ 4,819

a) Outside Services - include field services support and fulfillment activities, sales training, placement and refresh of POP materials, verify delivery of products, in-store promotions, rebate processing and reporting activities.
b) Incentives - Markdowns, Instant Coupons, the SmartLiving Catalog, Lighting and Fairs, and Fundraising incentives.
c) Marketing - includes custom-designed Point of Purchase (POP) materials and rebate forms, brochures, bill insert, print ads, in-store collateral materials for product demonstrations, advertising campaigns, website, community events and trade shows.
d) Includes $2,687 for ARRA Appliance Rebate Program for 2010 only.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	3,270.9
Annual Energy Savings (kWh Reduction Goal)	45,894,009
Lifetime Energy Savings (kWh Reduction Goal)	214,581,337
Annual Cost Rate ($/kWh)	$ 0.106
Lifetime Cost Rate ($/kWh)	$ 0.023
Electric b/c Ratio	3.55
Total Resource b/c Ratio	3.73

CL&P Standard Filing Requirement

Residential Retail Lighting

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 91	$ 99	$ 176	$ 55	$ 197	$ 144		$ 144
Contractor Staff	$ 0	$ 1	$ -	$ 0	$ -	$ 9		$ 9
Total Labor	$ 91	$ 100	$ 176	$ 55	$ 197	$ 153		$ 153
Materials & Supplies	$ 1	$ 1	$ 2	$ 0	$ 3	$ 2		$ 2
Outside Services	$ 770	$ 1,001	$ 1,053	$ 456	$ 1,183	$ 865	a)	$ 859
Incentives	$ 2,220	$ 6,907	$ 4,163	$ 3,206	$ 4,678	$ 3,180	b)	$ 3,159
Marketing	$ 95	$ 738	$ 689	$ 83	$ 774	$ 600	c)	$ 596
Administrative Expenses	$ 4	$ 7	$ 20	$ 2	$ 22	$ 20		$ 20
Other	$ 41	$ 11	$ 30	$ 24	$ 34	$ 30		$ 30
Total	$ 3,224	$ 8,765	$ 6,133	$ 3,826	$ 6,893	$ 4,850		$ 4,819

a) Outside Services - include field services support and fulfillment activities, sales training, placement and refresh of POP materials, verify delivery of products, in-store promotions, rebate processing and reporting activities.
b) Incentives - Markdowns, instant coupons, the SmartLiving Catalog, lighting and fairs, and fundraising incentives.
c) Marketing - includes custom-designed Point of Purchase (POP) materials and rebate forms, brochures, bill insert, print ads, in-store collateral materials for product demonstrations, advertising campaigns, website, community events and trade shows.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	3,270.9
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Annual Cost Rate ($/kWh)	$ 0.106
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Electric b/c Ratio	3.55
Total Resource b/c Ratio	3.73

CL&P Standard Filing Requirement

Retail Lighting

Program Costs

Year	Budget	Actual	% of Budget	Cost/participant	$/LT-kWh
2000	$2,463,000	$ 4,016,000	163%	$17	0.009
2001	$2,831,000	$ 4,828,000	171%	$12	0.008
2002	$2,700,000	$ 3,484,000	129%	$10	0.009
		$ (335,000)			
	Net 2002	$ 3,149,000	[1]		
2003	$2,450,000	$ 1,256,000	51%	$12	0.016
2004	$3,300,000	$ 4,393,000	133%	$2	0.007
2005 Revised	$3,525,928	$ 4,990,979	142%	$3	0.013
2006 Revised	$4,769,287	$ 4,650,971	98%	$2	0.011
2007 Revised	$5,040,000	$ 5,407,000	107%	$2	0.011
2008 Revised	$4,440,000	$ 4,815,000	108%	$2	0.009
2009 Revised	$5,347,000	$ 3,223,712	60%	$2	0.013
2010 Revised	$8,599,750	$ 8,764,502	102%	$2	0.012
2011 Revised	$6,132,901	$ -	0%	$0	0.000
2011 YTD (Jun)	n/a	$ 3,825,562	62%	$2	0.002
2011 Y/E Projected	$6,132,901	$ 6,892,595	112%	$2	0.002
2012	$4,850,450	n/a	n/a	n/a	n/a

Goal - Participation

Year	Goal	Actual	% of Goal
2000	150,000	233,558	156%
2001	171,731	410,908	239%
2002	325,557	340,560	105%
2003	235,394	104,246	44%
2004	776,473	1,792,216	231%
2005 Revised	1,008,021	1,444,142	143%
2006 Revised	1,499,192	1,980,791	132%
2007 Revised	1,295,355	2,409,313	186%
2008 Revised	1,737,107	2,375,501	137%
2009 Revised	2,543,370	1,606,793	63%
2010 Revised	2,616,015	4,046,226	n/a
2011 Revised	3,023,005	n/a	n/a
2011 YTD (Jun)	n/a	1,875,825	72%
2011 Y/E Projected	n/a	3,751,650	143%
2012	1,450,413	n/a	n/a

Goal - Lifetime MWh savings

Year	Budget	Actual	% of Budget
2000	152,772	438,631	287%
2001	244,030	610,545	250%
2002	366,566	398,613	109%
2003	201,631	78,468	39%
2004	354,614	591,781	167%
2005 Revised	293,530	376,443	128%
2006 Revised	367,504	427,603	116%
2007 Revised	359,509	483,854	135%
2008 Revised	400,146	540,122	135%
2009 Revised	436,889	240,352	55%
2010 Revised	348,967	730,452	209%
2011 Revised	444,923	n/a	-
2011 YTD (Jun)	n/a	340,848	98%
2011 Y/E Projected	n/a	530,048	152%
2012	214,581	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	1,391	607	43.6%
2004	2,970	5,144	173.2%
2005 Revised	3,382	4,279	126.5%
2006 Revised	3,957	4,703	118.8%
2007 Revised	3,665	5,584	152.4%
2008 Revised	4,561	6,243	136.9%
2009 Revised	6,479	4,024	62.1%
2010 Revised	5,981	14,589	243.9%
2011 Revised	8,691	n/a	-
2011 YTD (Jun)	n/a	3,906	65.3%
011 Y/E Projected	n/a	9,107	152.3%
2012	3,271	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.016	0.009	n/a	1,688
2001	0.012	0.008	n/a	1,279
2002	0.007	0.008	n/a	1,158
2003	0.011	0.016	1,663	2,069
2004	0.009	0.007	1,111	854
2005 Revised	0.012	0.013	1,043	1,166
2006 Revised	0.013	0.011	1,205	989
2007 Revised	0.014	0.011	1,375	968
2008 Revised	0.011	0.009	973	771
2009 Revised	0.012	0.013	825	801
2010 Revised	0.025	0.012	1,438	601
2011 Revised	0.014	n/a	706	n/a
2011 YTD (Jun)	n/a	0.011	n/a	979
2011 Y/E Projected	n/a	0.013	n/a	757
2012	0.023	n/a	1,483	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Retail Lighting

Budget/FTE :

1.1 FTE's for program administration, vendor interaction, sales and field support.

Goal

1,450,413 Goal is lighting products including bulbs, fixtures and portables and reflects the continued focus on markdowns.
2012 goal will continue build off of NCP promotions with an increased focus on specialty bulbs.

Cost/Unit

$3.34 Overall cost per product.

$2.19 Average incentive cost per unit including products from the SmartLiving Catalog component of the coupons and markdowns.

Goal Setting

Average weighted incentive cost was calculated based on desired product mix and delivery mechanism; goal was calculated based on available incentive dollars divided by average incentive

Metric Changes

Program design will continue to pursue NCPs with industry partners that are willing and able to implement markdown promotions and supply adequate Point of Sale data reports.
Program will continue to move toward specialty (higher wattage, dimmables, three ways, etc.) in 2012.

CL&P Standard Filing Requirement

Retail Appliances

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals		Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected		2012 Budget	2013 Budget
Labor									
NU Labor	$ -	$ 16		$ -	$ -	$ -		$ -	$ -
Contractor Staff	$ -	$ 0		$ -	$ -	$ -		$ -	$ -
Total Labor	$ -	$ 16		$ -	$ -	$ -		$ -	$ -
Materials and Supplies	$ -	$ -		$ -	$ -	$ -		$ -	$ -
Outside Services	$ -	$ 45		$ -	$ 3	$ 3		$ -	$ -
Incentives	$ -	$ 3,522		$ -	$ -	$ -		$ -	$ -
Marketing	$ -	$ 32		$ -	$ -	$ -		$ -	$ -
Administrative Expenses	$ -	$ -		$ -	$ -	$ -		$ -	$ -
Other	$ -	$ -		-	$ -	$ -		$ -	$ -
Total	$ -	$ 3,615	a)	$ -	$ 3	$ 3	b)	$ -	$ -

a) Represents the ARRA Appliance Rebate Program in 2010
b) Represents minor ARRA rollover expenses from Appliance Rebate Program in 2010

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate ($/kWh)	N/A
Lifetime Cost Rate ($/kWh)	N/A
Electric b/c Ratio	N/A
Total Resource b/c Ratio	N/A

Retail Appliances

Program Costs

Year	Budget	Actual	% of Budget	Cost/Partic.	$/LT-kWh
2000	$ 1,416,000	$ 1,259,000	89%	$171	0.049
2001	$ 863,000	$ 732,000	85%	$155	0.045
2002	$ 1,260,000	$ 1,674,000	133%	$64	0.041
2003	$ 1,600,000	$ 860,000	54%	$33	0.029
2004	$ 900,000	$ 1,451,000	161%	$56	0.027
2005 Revised	$ 1,154,867	$ 1,449,291	125%	$71	0.019
2006 Revised	$ 769,663	$ 975,790	127%	$55	0.014
2007 Revised	$ 559,800	$ 555,000	99%	$50	0.040
2008 Revised	$ 560,000	$ 88,448	16%	$58	0.045
2009 Revised	n/a	n/a	n/a	n/a	n/a
2010 Revised	$2,687,200	$ 3,615,349	135%	$103	0.088
2011 Revised	$ -	n/a	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 3,038	-	n/a	n/a
2011 Y/E Project	n/a	$ 3,038	-	n/a	n/a
2012	n/a	n/a	n/a	n/a	n/a

Goal - Participation

Year	Goal (Units)	Actual	% of Goal
2000	8,320	7,383	89%
2001	5,451	4,714	86%
2002	16,444	26,000	158%
2003	22,160	13,813	62%
2004	11,900	26,134	220%
2005	11,435	20,514	179%
2006 Revised	14,047	17,597	125%
2007 Revised	16,500	11,003	67%
2008 Revised	n/a	1,536	n/a
2009 Revised	n/a	n/a	n/a
2010 Revised	n/a	35,136	n/a
2011 Revised	n/a	n/a	n/a
2011 YTD (Jun)	n/a	n/a	n/a
2011 Y/E Project	n/a	n/a	n/a
2012			

Goal - Lifetime MWh Savings

Year	Goal (MWh)	Actual (MWh)	% of Goal
2000	23,016	25,736	112%
2001	21,322	16,244	76%
2002	32,945	41,111	125%
2003	51,655	29,791	58%
2004	23,799	54,186	228%
2005 Revised	52,447	77,371	148%
2006 Revised	54,081	67,748	125%
2007 Revised	5,785	14,018	n/a
2008 Revised	n/a	1,957	n/a
2009 Revised	n/a	n/a	n/a
2010 Revised	n/a	41,104	n/a
2011 Revised	n/a	n/a	n/a
2011 YTD (Jun)	n/a	n/a	n/a
2011 Y/E Project	n/a	n/a	n/a
2012	n/a	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	4,772	815	17.1%
2004	586	1,195	203.9%
2005 Revised	497	553	111.3%
2006 Revised	365	457	125.3%
2007 Revised	1,182	95	n/a
2008 Revised	n/a	13	n/a
2009 Revised	n/a	n/a	n/a
2010 Revised	n/a	1,210	n/a
2011 Revised	n/a	n/a	n/a
2011 YTD (Jun)	n/a	n/a	n/a
2011 Y/E Projected	n/a	n/a	n/a
2012	n/a	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.074	0.049	n/a	10,458
2001	0.053	0.045	n/a	9,643
2002	0.038	0.041	n/a	1,568
2003	0.038	0.029	594	1,055
2004	0.038	0.027	1,535	1,214
2005 Revised	0.022	0.019	2,324	2,621
2006 Revised	0.014	0.014	2,111	2,136
2007 Revised	0.097	0.040	474	5,873
2008 Revised	-	0.045	-	6,701
2009 Revised	n/a	n/a	n/a	n/a
2010 Revised	n/a	n/a	n/a	n/a
2011 Revised	n/a	n/a	n/a	n/a
2011 YTD (Jun)	n/a	n/a	n/a	n/a
2011 Y/E Project	n/a	n/a	n/a	n/a
2012	n/a	n/a	n/a	n/a

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Retail Products — UI residential customers, appliance and lighting retailers

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 170,647	$ 176,283	$ 79,338	$ 176,283	$ 184,412	a)	$ 193,633
Contractor Staff	$ -	$ -	$ -	$ -	$ -	b)	
Total Labor	$ 170,647	$ 176,283	$ 79,338	$ 176,283	$ 184,412		$ 193,633
Materials & Supplies	$ 6,765	$ 7,500	$ 64	$ 2,000	$ 4,993	c)	$ 5,000
Outside Services	$ 295,297	$ 279,756	$ 139,766	$ 200,000	$ 190,000	d)	$ 190,000
Incentives	$ 1,744,441	$ 1,374,227	$ 2,467,166	$ 2,467,166	$ 1,106,000	e)	$ 1,080,480
Marketing	$ 204,377	$ 285,000	$ 36,358	$ 50,000	$ 260,000	f)	$ 260,000
Other	$ 5,699	$ 5,803	$ 2,013	$ 5,803	$ 5,803	g)	$ 5,800
Administrative Expenses	$ 3,225	$ 4,647	$ 231	$ 4,647	$ 4,647	h)	$ 10,000
Total	$ 2,430,451	$ 2,133,216	$ 2,724,936	$ 2,905,899	$ 1,755,855		$ 1,744,913

a) 1.85 FTEs
b) No comment
c) Printing of Program forms and supplies for lighting fairs/events
d) Incentive fulfillment services, field services for lighting fairs/events, NCP administrative services. Code and Standards monitoring
e) 491,954 energy efficient lighting products - 471,306 CFLs, 18,000 LEDs and 2,647 Fixtures
f) In-store POP, creation of coupons, forms, marketing materials, seasonal advertising and Public Relations
g) NEEP participation
h) Meals, miles, travel and training

Goals and Metrics Information:

Savings	2012
Demand Savings (kW)	1,326
Annual Energy Savings (kWh)	14,731,133
Lifetime Energy Savings (kWh)	72,381,047
Annual Cost Rate ($/kWh)	$ 0.119
Lifetime Cost Rate ($/kWh)	$ 0.024
Cost per kW	$ 1,324
Electric System B/C Ratio	3.35
Total Resource B/C Ratio	3.64

The United Illuminating Company
LF-26 Standard Filing Requirement

Retail Products

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$1,546	$1,831	118.4%
2001	$1,665	$1,589	95.4%
2002	$1,379	$1,303	94.5%
2003	$1,070	$592	55.3%
2004	$1,361	$1,267	93.1%
2005	$1,506	$1,592	105.7%
2006	$1,521	$1,664	109.4%
2007	$1,238	$1,247	100.7%
2008	$1,208	$1,282	106.1%
2009	$1,863	$1,344	72.1%
2010	$2,303	$2,430	105.5%
2011	$2,133		
2011 YTD (Jun)	$2,133	$2,725	127.8%
2011 YE Projected	$2,133	$2,906	136.2%
2012	$1,756		

Goal - Number of Bulbs, Fixtures & Appliances

Year	Goal	Actual	% of Goal Achieved
2000	20,799	29,020	139.5%
2001	62,823	102,148	162.6%
2002	61,459	95,456	155.3%
2003	44,073	40,736	92.4%
2004	233,800	242,338	103.7%
2005	259,685	337,713	130.0%
2006	455,658	442,703	97.2%
2007	335,000	721,000	215.2%
2008	465,806	658,600	141.4%
2009	856,772	602,866	70.4%
2010	531,976	1,131,282	212.7%
2011	1,066,514		
2011 YTD (Jun)	1,066,514	788,013	73.9%
2011 YE Projected	1,066,514	1,461,124	137.0%
2012	491,954		

Goal - Installed kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	4,487	7,078	157.7%
2001	7,124	9,563	134.2%
2002	4,523	7,997	176.8%
2003	3,747	3,465	92.5%
2004	11,564	12,166	105.2%
2005	11,314	14,968	132.3%
2006	14,695	15,216	103.5%
2007	9,658	21,152	219.0%
2008	12,893	17,390	134.9%
2009	21,208	12,485	58.9%
2010	20,067	42,955	214.1%
2011	39,951		
2011 YTD (Jun)	39,951	30,148	75.5%
2011 YE Projected	39,951	54,733	137.0%
2012	14,731		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	404	639	158.2%
2004	1,143	1,286	112.5%
2005	995	1,339	134.6%
2006	1,177	1,158	98.4%
2007	761	1,615	212.2%
2008	1,224	1,613	131.8%
2009	2,009	1,186	59.0%
2010	1,772	3,788	213.8%
2011	3,518		
2011 YTD (Jun)	3,518	2,629	74.7%
2011 YE Projected	3,518	4,820	137.0%
2012	1,326		

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	76,065	116,542	153.2%
2001	91,689	114,927	125.3%
2002	48,850	87,336	178.8%
2003	47,247	34,208	72.4%
2004	108,108	115,967	107.3%
2005	80,398	111,485	138.7%
2006	113,098	126,122	111.5%
2007	69,512	180,938	260.3%
2008	91,460	135,890	148.6%
2009	127,649	84,297	66.0%
2010	116,297	203,783	175.2%
2011	178,150		
2011 YTD (Jun)	178,150	114,174	64.1%
2011 YE Projected	178,150	244,066	137.0%
2012	72,381		

Program Ratios

Year	$/kWh Target	$/kWh Actual	$/LT kWh Target	$/LT kWh Actual	$/kW Target	$/kW Actual	Cost/ Socket
2000	$0.345	$0.259	$0.020	$0.016	$0	$0	$63.094
2001	$0.234	$0.166	$0.018	$0.014	$0	$0	$15.556
2002	$0.305	$0.163	$0.028	$0.015	$0	$0	$13.650
2003	$0.286	$0.171	$0.023	$0.017	$2,649	$926	$14.533
2004	$0.118	$0.104	$0.013	$0.011	$1,191	$985	$5.228
2005	$0.133	$0.106	$0.019	$0.014	$1,514	$1,189	$6.131
2006	$0.104	$0.109	$0.013	$0.013	$1,292	$1,437	$3.652
2007	$0.128	$0.059	$0.018	$0.007	$1,627	$772	$1.730
2008	$0.094	$0.074	$0.013	$0.009	$987	$795	$1.947
2009	$0.088	$0.108	$0.015	$0.016	$927	$1,133	$2.229
2010	$0.115	$0.057	$0.020	$0.012	$1,300	$641	$2.148
2011	$0.053		$0.012		$606		
2011 YTD (Jun)	$0.053	$0.090	$0.012	$0.024	$606	$1,036	$3.458
2011 YE Projected	$0.053	$0.053	$0.012	$0.012	$606	$603	$1.989
2012	$0.119		$0.024		$1,324		

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - Residential Retail Lighting

Budget/FTE:

2012 UI Labor 1.85 FTE includes field support, data/financial administration and event participation

Goal:

	Units	Incentive
Non General Service CFLs @ 15w avg	72,146	$ 2.99
General Service CFLs @15w avg	399,160	$ 1.37
LEDs		$15-20

Cost/kWh (Cost/Unit):

2012 cost rates increase slightly due to an increase in the promotion of LEDs.

Goal Setting Methodology:

Goals are based on a measure mix and production levels based on available funds, retailer sales data, and average lighting wattages.

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Residential New Construction (Electric and Natural Gas)

Objective:

The objective of the electric and natural gas Residential New Construction ("RNC") program is to reduce the energy use and peak demand in new housing. Related objectives include increasing builder and consumer awareness of energy-efficient building practices, and to affect permanent market movement to more energy-efficient residential new construction in the State of Connecticut.

Target Market:

The target market of the RNC program is any residentially metered single or multifamily unit (three (3) story or less) being built in Connecticut. Based on data from the 2010 U.S. Census Bureau and DECD, a total of 3,932 housing permits were issued in Connecticut. Housing permits issued within CL&P and UI territory total 3,822, of which 792 participated in the RNC program in 2010 (twenty-one (21) percent market share).

To have the most widespread effect on the market, the Companies will focus on four main areas: Building Code, ENERGY STAR® Homes, Low-Load Homes, and Outreach and Education.

1. Building Code:

   The Companies will work to improve the energy efficiency of newly constructed homes by supporting the adoption of 2009 International Energy Conservation Code ("IECC"), adopted by the Regulation Review Committee as an Amendment to the 2005 State Building Code September 27, 2011. The 2003 International Residential Code (IRC) will still be in effect for one and two family homes and townhouses until the 2009 IRC is adopted in the second half of 2012. The Companies will work with code advocacy, code compliance, and code enforcement agencies and organizations, as well as the residential building sector. The residential building sector will be significantly impacted by the more stringent air and duct leakage requirements, including performance testing for duct leakage in many homes according to the 2009 IECC. Because many requirements of the new energy code will require qualified personnel for compliant implementation, proper support for the industry will be critical to effective adoption. These more stringent code requirements represent a large program opportunity given performance testing requirements for many homes. Air and Duct sealing will help the companies reach the goal of achieving deeper energy savings per home.

2. ENERGY STAR Qualified Homes:

   As Connecticut adopts a more comprehensive building code, it will be critical at this point to influence builders and homeowners to take the next step to meet ENERGY STAR standards. The Companies will target residential new construction projects, particularly those projects where builders are willing to incorporate advanced building design practices and meet the increasing ENERGY STAR requirements, as set by the US Environmental Protection Agency (U.S. EPA).

3. Low Load Homes:

   Low-Load Home construction is a way of building that the leading high performance builders have started to focus on in Connecticut. These will be the way all homes are built in the future. These homes go above and beyond ENERGY STAR requirements to the development of near-zero energy homes. The Companies, in previous years, have offered the CT Zero Energy Challenge to recognize and award these types of homes. The CT Zero Energy Challenge will continue in 2012, but since low-load home construction has proven to be a viable building practice, it will now become an integral part of the RNC program in 2012.

4. Outreach and Education:

   Outreach and education elements related to energy efficiency will focus on prospective new homebuyers, builders, developers, and other market participants such as architects, building code officials, home energy raters, insulation contractors, real estate agents, and HVAC contractors including geothermal installers. Relationships will continue to be fostered with the appropriate agents of single and multi-family housing for limited-income families, including Public Housing Authorities, the Connecticut Housing Finance Authority, the Department of Housing and Urban Development, and other not-for-profit community development entities. Additionally, there is an opportunity for realtors, appraisers, and mortgage companies to recognize the advantages of the RNC program and how an energy-efficient home is more competitive in the marketplace than an inefficient home.

Program Description:

The Companies will offer four energy efficiency tracks to program participants, which are summarized below:

1.) ENERGY STAR Certification Incentive

Since the inception of the ENERGY STAR for New Homes program in 1995, the program's requirements have continued to evolve in response to increased rigor in mandated code requirements and more efficient standard building practices to ensure that homes that earn the label continue to represent a meaningful improvement over non-labeled homes. As codes and standard practices have continued to increase across the country, the U.S. EPA is releasing a third-generation of guidelines (ENERGY STAR Version 3) that is being phased in during 2011 and will become mandatory in 2012.[6] To assure compliance with ENERGY STAR qualification criteria, all homes must be inspected and verified by a RESNET[7] certified Home Energy Rating System ("HERS") rater under contract to the homeowner or builder. Such raters assist throughout the entire building process to assure ENERGY STAR standards are met. The Residential New Construction program is following the timeline proposed by the U.S. EPA. All homes with permit dates after January 1, 2012 must be qualified under Version 3. All homes with permit dates prior to January 1,

[6] ENERGY STAR website, http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.nh_v3_guidelines

[7] Residential Energy Services Network

2012 must be qualified under Version 3 if the final inspection dates are after July 1, 2012.[8] The Companies will continue to pay tiered incentives for homes that comply with ENERGY STAR for Homes guidelines in accordance with the ENERGY STAR transition timeline.

2.) Home Energy Rating System Incentive

The HERS Incentive will be a new track for homes that comply with the standards of ENERGY STAR version 2.5. It will require a RESNET certified HERS rater, but will not receive an ENERGY STAR certification. This track is being added because of a forecasted decline in participation of ENERGY STAR 3.0. With version 3.0 requiring significant changes for builders and HVAC contractors, the HERS Incentive track will encourage continued participation in the program while the industry acclimates to the ENERGY STAR 3.0 requirements. Participants will receive tiered incentives for the HERS Incentive track but at a lesser amount than ENERGY STAR 3.0.

3.) RNC Prescriptive Incentive

Residential New Construction prescriptive incentives will continue to be provided for thermal enclosure systems, geothermal heating and cooling, high-efficiency HVAC, and high-efficiency domestic hot water systems. These incentives can be bundled with ENERGY STAR certification or the HERS incentive, but do not require the services of a HERS rater.

4.) Low Load Homes Incentive

The Companies will provide incentives for Low Load Homes to demonstrate methods and benefits of building homes that minimize peak load growth. This new track will involve moving builders and consumers beyond ENERGY STAR standards to the development of high-performing and near-zero energy homes. The Low Load Homes requirements will focus on reducing heat loss kWh per square foot.

In order to reduce costs and promote market competition, the program will continue to allow the free market of independent, certified HERS raters to participate in the program. In 2011 this process has continued to increase the cost-effectiveness of the program as builders and homeowners interested in obtaining a HERS rating have had to contribute to the cost of the rating. Home energy ratings are useful vehicles for builders to market their homes, but the ratings themselves do not generate energy savings. Because it is in the builder's best interest to have the rating performed, it is appropriate for the builder to be responsible for the rating's cost. Although the Electric and Natural Gas Companies do not subsidize the full cost of HERS ratings, tiered incentives are provided for homes that meet various levels of the ENERGY STAR HERS Index, rewarding those that achieve the greatest energy efficiency.

If available, federal and state tax credits, along with Clean Energy Finance and Investment Authority (CEFIA) Solar PV, solar thermal rebate and geothermal rebate programs will be communicated to RNC participants.

[8] ENERGY STAR web site, ENERGY STAR for Homes Version 3 Guidelines web page

Incentive Strategy:

The Electric and Natural Gas Companies will once again offer tiered incentives for homes that meet high-performance criteria based upon a HERS Index rating. The four incentive tracks available in 2012 are listed in the tables below:

Track 1: ENERGY STAR Certification Incentive

ENERGY STAR Certification Incentive Chart (Note 1 & 2)							
Tier	HERS Index	Single Family		Single Family Attached		Multi Family	
		Applicant Incentive	Rating Incentive	Applicant Incentive	Rating Incentive	Applicant Incentive	Rating Incentive
Tier 1	74-65	$500	$100	$375	$100 (cap $6,000/project)	$250	$100 (cap = $5,000/project)
Tier 2	64-55	$1,500	$200	$1,125	$165 (cap $7,250/project)	$750	$125 (cap = $6,250/project)
Tier 3	54-45	$2,500	$300	$1,500	$230 (cap $8,500/project)	$1,000	$150 (cap = $7,500/project)
Tier 4	<45	$3,000 + $50/point below 45	$400	$2,000+$40/ point below 45	$300 (cap $9,950/project)	$1,300+$25/ point below 45	$175 (cap = $8,750/project)

Track 2: Home Energy Rating System Incentive

Home Energy Rating System Incentive Chart (Note 1,2, 9)							
Tier	HERS Index	Single Family		Single Family Attached		Multi Family	
		Applicant Incentive	Rating Incentive	Applicant Incentive	Rating Incentive	Applicant Incentive	Rating Incentive
Tier 1	74-65	$250	$50	$200	$75 (cap $5,000/project)	$150	$25 (cap = $3,000/project)
Tier 2	64-55	$750	$100	$500	$125 (cap $6,250/project)	$375	$75 (cap = $4,250/project)
Tier 3	54-45	$1,500	$200	$1,125	$150 (cap $7,500/project)	$700	$125 (cap = $5,500/project)
Tier 4	<45	$2,000 + $30/point below 45	$300	$1,500+$20/ point below 45	$175 (cap $8,750/project)	$1,125+$20/ point below 45	$175 (cap = $6,750/project)

Track 3: RNC Prescriptive Incentives

Thermal Enclosure System (Note 1,3)	Thermal Enclosure System (Note 3)	$0.50/square foot for above grade floor area for homes with gas or electric heat.
HVAC	ENERGY STAR (14.5 SEER 12 EER)	$250 per system including ductless units
Water Heating (Note 1)	Energy Efficient Hot Water Heating	$100 for ENERGY STAR natural gas instantaneous hot water with 0.82 efficiency and electronic ignition; $100 for ENERGY STAR gas boiler with indirect hot water. $400 for ENERGY STAR heat pump water heater and/or solar thermal in an all-electric home.
Geothermal (Note 4)	VIP Geothermal	$500 per ton capped at $1,500 per location for VIP systems that meet 2012 ENERGY STAR specifications.
Lights	ENERGY STAR Lighting	Required in 80 percent of qualifying sockets in homes that receive an ENERGY STAR or HERS rating incentive.
Appliances (Note 5)	ENERGY STAR Appliances	Required for clothes washer, dishwasher and refrigerator in any home that receives an ENERGY STAR or HERS incentive. A $50 rebate will be paid for a TopTen refrigerator, washing machine or dishwasher (www.TopTenUsa.org)

Track 4: Low-Load Homes Incentive

Low-Load Homes Incentive Chart						
Requirements	**Single Family**		**Single Family Attached**		**Multi Family**	
	Applicant Incentive	**Rating Incentive**	**Applicant Incentive**	**Rating Incentive**	**Applicant Incentive**	**Rating Incentive**
To Be Determined	$2,000	$200	$2,000	$200	$2,000	$200

Notes:

1. The ENERGY STAR incentive and the HERS Incentive amounts are for homes with natural gas heat or homes with electric heat. Currently, full funding is not available for homes with fuel oil, propane or other heating systems. Therefore, for homes with fuel oil heat, propane heat (or other heat), the applicant incentives are 30 percent of the incentive amounts listed above. If funding for these homes becomes available, incentives will be paid at 100 percent. For homes with natural gas heat, 100 percent of the incentive for ENERGY STAR (including the rater incentive) and insulation incentive is allocated to the appropriate natural gas budget. Likewise, the water heating incentive is allocated to the appropriate natural gas or electric company. All other incentives including the 30 percent reduced Incentives for ENERGY STAR, HERS track, and insulation for fuel oil and propane heated homes will be allocated to the appropriate electric company. In situations where dual fuel heating or water heating systems are installed (e.g., geothermal system with natural gas back-up, electric heat pump with propane back-up), the incentive allocation is based on the estimated benefit associated with each fuel type.
2. Homes must have a mechanical ventilation system installed to qualify for the ENERGY STAR or HERS Incentive. Homes looking to receive the ENERGY STAR certification incentive must meet all ENERGY STAR 3.0 Checklists and requirements including Thermal Enclosure System, HVAC System Quality Installation, and Water Management System. ENERGY STAR homes installing forced hot air HVAC systems are required to have an HVAC contractor that is credentialed through an EPA-recognized industry organization. The HERS Incentive homes must meet the Thermal Enclosure System Checklist.
3. All insulation must meet Grade I standards as defined by RESNET. NO insulation batt products can qualify, except for approved hybrid options. In addition, walls must have at least R-21 insulation and ceilings must have at least R-40. Both walls and ceilings must qualify as whole system in order to receive rebate. Thermal Enclosure System rebates are based on above grade conditioned floor area and are capped at the following levels.
   - One bedroom home: $960
   - Two bedroom homes: $1,330
   - Three bedroom homes: $1,695
   - Four bedroom homes: $2,010
   - Five+ bedroom homes: $2,195
4. Homes must successfully meet the Energy Efficiency Fund's geothermal VIP requirements by having units operate at least 85 percent of their rated efficiency and capacity. Geothermal systems must meet 2012 ENERGY STAR requirements. Open loops are not eligible.
5. The Electric Companies consider ENERGY STAR appliances to be the baseline and will not take credit for appliance savings in the RNC program.
6. RNC program projects with residents on limited income will receive 125 percent of the incentives described above. Limited income is defined as individuals which are at 60 percent or below of the state's median income level.
7. The Electric and Natural Gas Companies reserve the right to add additional rater incentives based on changing market conditions.
8. RNC rebates and incentives noted above do not include any forthcoming ARRA limited-time rebates for appliances and HVAC equipment or CCEF funding for renewable energy.
9. HERS Incentive Track follows the standards for ENERGY STAR ver. 2.5 and requires a certified HERS rater. All ENERGY STAR checklists must be submitted. Must have mechanical ventilation system installed. Must have ENERGY STAR lighting in 80 percent + of sockets. Homes with fuel oil heat, propane heat (or other heat), the applicant incentives are 30 percent of the incentive amounts listed.

Marketing Strategy:

The 2012 Residential New Construction program will continue to be promoted to prospective new homebuyers, builders, developers, and other market participants such as architects, building code officials, home energy raters, insulation contractors, real estate agents, real estate appraisers, and HVAC contractors, including geothermal installers. Ultimately, it will be the market leaders (builders and industry associations) that will drive participation in the RNC program. The marketing strategy will be based on getting them timely, relevant information. The messaging will include information on current technology/building trends and benefits and program details. Communication tactics may include:

- program seminars targeting builders using industry association lists as a base for participants;
- selected advertising in local and regional trade publications;
- submission of articles to local and regional trade publications and consumer publications (in print and on-line, which may be written in collaboration with builders);
- participation in consumer events such as home shows;
- participation in association events, including sponsorships, when appropriate;
- outreach to legislative audiences through their newsletters, forums, one-on-one meetings and public events;
- promotion of the RNC program through the media, and;
- any public relation marketing opportunities that the CT ZEC generates.

A marketing campaign will be explored in 2012 offering builders/developers a way to uniquely market ENERGY STAR homes to potential homebuyers. With homeowners extremely aware of the monthly expenses necessary to operate a home, the marketing campaign, tentatively called ENERGY STAR: New Home, No Bill, would offer an exciting way for homebuyers to see the value of an ENERGY STAR Home as soon as they move in. A homeowner that buys one of the homes under the ENERGY STAR: New Home, No Bill campaign would be able to move into the home and not pay an electric bill for one year. Over the course of a year, participants will receive their electric bill with no amount due, but showing their total usage, the actual costs incurred, and how they have performed in relation to similar homes in their demographic. Additionally, energy savings tips will be included each month to educate the homeowner on how to reduce their energy usage.

The campaign will be a pilot initially targeted to builders/developers/ building ENERGY STAR homes that have all electric heating and/or cooling. Fuel type may be expanded if successful.

The traditional structure of the RNC program is based on a homeowner or builder complying with program requirements and receiving an incentive check once the home is complete. Under the ENERGY STAR: New Home, No Bill campaign, builders/developers choosing to participate offer the

incentives in the form of a credit on the homebuyer's electric bill for one year. The electric utility bill credit will be offset by the incentive dollars that would otherwise have gone to the builder.

The goal of the campaign is threefold: one, to encourage participation in the RNC program; two, offer builders/developers an innovative marketing resources to help sell their ENERGY STAR homes; and three, for the homebuyer to have more direct participation in the Energy Efficiency Fund's RNC Program, instead of the Fund being solely behind the scene with the builder/developer.

With the new ENERGY STAR version 3.0 being launched in 2012, this campaign would offer homebuyers an exciting way to reap the benefits of their investment in an ENERGY STAR Home from the moment they move in.

Two key factors that have become increasingly important to today's homebuilders and homeowners are reducing their environmental impact and saving on the rising costs of energy. In pursuit of these goals, the inaugural CT Zero Energy Challenge (CT ZEC) was developed for 2010 and offered again in 2011 (see www.CTZeroEnergyChallenge.com). The CT ZEC has been a very successful demonstration project with participants reflecting a broad spectrum of designs, sizes and efficiency measures. Winners of the 2010 CT ZEC were announced in December, 2010, and many stories have appeared in many newspapers such as the Hartford Courant, The New Haven Register and The Day., and in several on-line publications. Additionally, many of the contestants have hosted open houses and media events at their building sites throughout construction. Based on the success of the CT ZEC Challenge, it will be offered again in 2012 and the same media strategy will be pursued in the new 2012 Challenge to help increase awareness of super-efficient homes.

New Program Issues:

The residential building code represents the minimum standard for new construction. While increasing code compliance is a critical component of this program, ENERGY STAR requirements represent a higher level of sustainability and long-term cost-effectiveness for consumers. During 2011, the current ENERGY STAR 2.0 framework began to shift to ENERGY STAR 3.0. The phase-in included a transitional period (ENERGY STAR 2.5) that is taking place in 2011. All homes that were permitted before April 1 and completed in 2011 can still qualify under version 2.0. All homes permitted after April 1, 2011 and completed in 2011 must comply with version 2.5. All homes with permit dates after January 1, 2012 must be qualified under Version 3. All homes with permit dates prior to January 1, 2012 must be qualified under Version 3 if the final inspection dates are after July 1, 2012. This revised program represents more stringent guidelines for the energy efficiency of new homes by addressing the control of air, thermal resistance, and moisture flow resulting in a more comfortable, durable, affordable, and healthy home. Detailed checklists (Thermal Enclosure System, HVAC System Quality Installation, HVAC System Quality Installation, and Water Management System) must be submitted to assure that program standards are being met. Participants can qualify for the full ENERGY STAR incentive if the project meets the 3.0 standards. To assist with the transition to the new 3.0 standards, lesser incentives will be offered for homes that meet the version 2.5 specifications under the HERS Incentive track.

With the housing market in a prolonged depression, the inventory of new homes and existing has increased. Therefore, it is imperative for builders and others involved in the home building industry to differentiate their products from the multitudes that do not incorporate the latest energy-saving technologies. Homes built to increased energy-efficiency standards are proving to be more attractive to prospective homebuyers since they not only help the environment, but can provide their owners the benefit of substantially reduced energy bills. Participation in the new ENERGY STAR program can thus encourage new home sales as well as helping promote energy efficiency.

While these revised standards are beneficial to the mission of greater energy efficiency and sustainability, they are stringent and challenging and may cause some builders to drop out of the ENERGY STAR program. The Companies anticipated this development and presented a series of training seminars through 2011 designed at making compliance to the new standards easier.

In addition to preparing the building industry for ENERGY STAR version 3.0 standards, for 2012 the Companies will work with the industry as it prepares for the adoption of 2009 IECC, which is estimated to take place in mid 2012.

2009 IECC major code changes include the following:

- Building air tightness must be demonstrated through testing procedures or verified with rigorous inspections.
- Programmable thermostats are required for forced-air heating systems.
- Duct systems are required to be tested for leakage, unless they are within conditioned space.
- Minimum floor insulation has been increased to R-38.
- Minimum basement wall insulation has been increased to R-19.
- At least 50% of all light fixtures in a residence must have a high-efficacy lamp.
  - 40 lum/W <=15W
  - 50 lum/W 15W-40W
  - 60 lum/W >40W

The new duct testing requirement is a momentous step for the building code and it is anticipated building officials will need to rely on HERS raters in order to effectively enforce this aspect of the code.

The Companies will also help prepare the markets and support adoption of IECC 2012, which is expected to be introduced in 2012, and will require air leakage testing of all new homes as well as 75% efficient lighting.

CL&P Standard Filing Requirement

Residential New Construction

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 94	$ 108	$ 200	$ 87	$ 197	$ 174		$ 174
Contractor Staff	$ -	$ 14	$ -	$ 1	$ 2	$ 28		$ 28
Total labor	$ 94	$ 122	$ 200	$ 88	$ 199	$ 202		$ 202
Materials & Supplies	$ 0	$ 3	$ 3	$ 1	$ 3	$ 3		$ 3
Outside Services	$ (4)	$ (4)	$ 150	$ 6	$ 147	$ 35		$ 35
Incentives	$ 363	$ 864	$ 1,059	$ 595	$ 1,041	$ 981	a)	$ 975
Marketing	$ 24	$ 38	$ 40	$ 8	$ 25	$ 35	b)	$ 35
Administrative Expenses	$ 7	$ 6	$ 8	$ 2	$ 8	$ 5		$ 5
Other	$ 10	$ 5	$ -	$ 6	$ 12	$ -		$ -
Total	$ 494	$ 1,034	$ 1,460	$ 706	$ 1,436	$ 1,261		$ 1,254

a) Incentives Includes payments to builders and raters as well as incentives for home certification, insulation, geothermal commissioning, HVAC (including water), and lighting.

b) Marketing includes development and printing of an RNC brochure, sponsorship of various events and conferences including home shows, the Zero Energy Challenge (website and awards), promotional signs including lawn signs for RNC and Zero Energy participants, and additional incentives as necessary.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	356.4
Annual Energy Savings (KWh Reduction Goal)	1,718,002
Lifetime Energy Savings (kWh Reduction Goal)	29,900,570
Annual Cost Rate ($/kWh)	$ 0.734
Lifetime Cost Rate ($/kWh)	$ 0.042
Electric b/c Ratio	1.84
Total Resource b/c Ratio	1.99

CL&P Standard Filing Requirement

Residential New Construction

Program Costs

Year	Budget	Actual	% of Budget	Cost/participant	$/LT-kWh
2000	$ 1,744,000	$ 1,508,000	86%	$1,797	0.068
2001	$ 1,315,000	$ 1,283,000	98%	$3,534	0.081
2002	$ 1,400,000	$ 1,275,000	91%	$2,087	0.027
2003	$ 1,655,000	$ 1,115,726	67%	$1,622	0.051
2004	$ 900,000	$ 767,514	85%	$1,089	0.084
2005 Revised	$ 1,320,429	$ 1,187,496	90%	$1,197	0.035
2006 Budget	$ 1,769,000	$ 1,688,185	95%	$1,310	0.039
2007 Revised	$ 1,700,000	$ 1,414,189	83%	$2,050	0.073
2008 Revised	$ 1,650,000	$ 1,563,639	95%	$2,451	0.079
2009 Revised	$ 1,350,000	$ 494,394	37%	$921	0.039
2010 Revised	$ 2,499,625	$ 1,034,433	41%	$1,713	0.041
2011 Revised	$ 1,460,024	n/a	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 705,716	48%	$2,663	0.045
2011 Y/E Projec	n/a	$ 1,435,516	98%	$2,709	0.054
2012	$ 1,261,050	n/a	n/a	n/a	n/a

Goal - No. of New Homes Built to Standard

Year	Goal	Actual	% of Goal
	686	839	122%
2001	734	363	49%
2002	605	611	101%
2003	1,005	688	68.5%
2004	600	705	117.5%
2005 Revised	932	992	106.4%
2006 Revised	1,421	1289	90.7%
2007 Revised	1,546	690	44.6%
2008 Revised	1,255	638	50.8%
2009 Revised	752	537	71.4%
2010 Revised	964	604	62.6%
2011 Revised	609	n/a	n/a
2011 YTD (Jun)	n/a	265	43.5%
2011 Y/E Projec	609	530	87.0%
2012	499	n/a	n/a

Goal - Lifetime MWh savings

Year	Budget	Actual	% of Budget
2000	54,082	22,226	41%
2001	24,924	11,091	44%
2002	27,799	33,911	122%
2003	12,969	21,782	82%
2004	10,891	9,114	83.7%
2005 Revised	17,985	34,399	191.3%
2006 Revised	16,468	43,764	265.8%
2007 Revised	19,791	19,431	98.2%
2008 Revised	27,494	19,910	72.4%
2009 Revised	24,648	12,656	51.3%
2010 Revised	37,543	25,469	67.8%
2011 Revised	26,507	n/a	n/a
2011 YTD (Jun)	n/a	15,685	59.2%
2011 Y/E Projec	26,507	26,660	100.6%
2012	29,901	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	229	476	207.9%
2004	343	268	78.1%
2005	687	1,885	274.4%
2006 Budget	682	2,225	326.3%
2007 Revised	544	505	92.8%
2008 Revised	1,158	521	45.0%
2009 Revised	596	256	42.9%
2010 Revised	482	339	70.3%
2011 Revised	584	n/a	n/a
2011 YTD (Jun)	n/a	186	31.9%
1 Y/E Projected	584	428	73.3%
2012	356	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.032	0.068	n/a	5470
2001	0.031	0.081	n/a	5359
2002	0.030	0.027	n/a	2012
2003	0.093	0.051	4,814	2,345
2004	0.083	0.084	2,627	2,862
2005 Revised	0.073	0.035	1,922	630
2006 Revised	0.107	0.039	2,594	759
2007 Revised	0.086	0.073	3,125	2,800
2008 Revised	0.060	0.079	1,425	2,999
2009 Revised	0.055	0.039	2,264	1,932
2010 Revised	0.067	0.041	5,187	3,051
2011 Revised	0.055	n/a	2,500	n/a
2011 YTD (Jun)	n/a	0.045	n/a	3,785
2011 Y/E Projec	n/a	0.054	n/a	3,352
2012	0.042	n/a	3,538	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Residential New Construction

Budget/FTE

1.3 FTE for program administration, vendor interaction, sales and field support

Goal

499 Homes completed

Cost/Unit

$2,529 Average cost

Goal Setting Methodology

Reflects shift
Average cost

Metric Changes

Program focus will move towards high performing "zero energy" homes.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Residential New Construction

Baseline Assumptions:

Market: Residential new construction

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 57,658	$ 72,166	$ 37,207	$ 72,166	$ 58,166	a)	$ 61,074
Contractor Staff	$ -	$ -	$ -	$ -	$ -	b)	$ -
Total Labor	$ 57,658	$ 72,166	$ 37,207	$ 72,166	$ 58,166		$ 61,074
Materials & Supplies	$ 368	$ 2,500	$ 250	$ 2,500	$ 1,500	c)	$ 1,500
Outside Services	$ 14,188	$ 10,000	$ 1,363	$ 10,000	$ 7,500	d)	$ 7,500
Incentives	$ 82,087	$ 100,757	$ 76,884	$ 100,757	$ 92,663	e)	$ 88,650
Marketing	$ 12,557	$ 25,000	$ 12,755	$ 25,000	$ 15,000	f)	$ 15,000
Other	$ 2,211	$ -	$ 760	$ 760	$ -	g)	$ -
Administrative Expenses	$ 7,135	$ 5,017	$ (1,165)	$ 4,257	$ 2,500	h)	$ 2,500
Total	$ 176,204	$ 215,440	$ 128,054	$ 215,440	$ 177,329		$ 176,224

a) .60 FTEs
b) No comment
c) Printing of program forms and supplies
d) Technical assistance for 113 homes
e) Efficiency measure upgrades for 113 homes
f) General awareness program marketing, Zero Energy Homes Challenge, builder co-op advertising
g) No comment
h) Meals, miles, travel and training

Goals and Metrics Information:

Savings	2012
Demand Savings (kW)	103
Annual Energy Savings (kWh)	241,509
Lifetime Energy Savings (kWh)	2,941,285
Annual Cost Rate ($/kWh)	$ 0.734
Lifetime Cost Rate ($/kWh)	$ 0.060
Cost per kW	$ 1,722
Electric System B/C Ratio	1.97
Total Resource B/C Ratio	1.31

The United Illuminating Company
LF-26 Standard Filing Requirement

Residential New Construction

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$359	$513	142.9%
2001	$536	$497	92.7%
2002	$424	$520	122.6%
2003	$523	$357	68.3%
2004	$541	$606	112.0%
2005	$841	$1,140	135.6%
2006	$644	$375	58.2%
2007	$396	$153	38.6%
2008	$396	$440	111.1%
2009	$442	$198	44.8%
2010	$356	$176	49.4%
2011	$215		
2011 YTD (Jun)	$215	$128	59.6%
2011 YE Projected	$215	$215	100.2%
2012	$177		

Goal - Number of Homes

Year	Goal No of Units	Actuals	% of Goal Achieved
2000	100	110	110.0%
2001	127	127	100.0%
2002	106	141	133.0%
2003	120	276	230.0%
2004	400	407	101.8%
2005	500	548	109.6%
2006	500	613	122.6%
2007	300	425	141.7%
2008	300	300	100.0%
2009	219	23	10.5%
2010	91	46	50.5%
2011	86		
2011 YTD (Jun)	86	-	0.0%
2011 YE Projected	86	86	100.0%
2012	113		

Goal - Installed kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	202	226	111.9%
2001	208	208	100.0%
2002	174	230	132.2%
2003	108	297	275.0%
2004	378	385	101.9%
2005	757	1,038	137.1%
2006	588	1,038	176.5%
2007	513	1,672	325.9%
2008	550	801	145.6%
2009	643	62	9.6%
2010	281	123	43.8%
2011	313		
2011 YTD (Jun)	313	-	0.0%
2011 YE Projected	313	313	100.0%
2012	242		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	23	25	108.7%
2004	170	173	101.8%
2005	318	212	66.7%
2006	175	231	131.9%
2007	210	290	138.1%
2008	196	267	136.2%
2009	138	31	22.5%
2010	71	52	73.2%
2011	89		
2011 YTD (Jun)	89	-	0.0%
2011 YE Projected	89	89	100.0%
2012	103		

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	3,365	3,753	111.5%
2001	4,338	4,338	100.0%
2002	3,816	5,044	132.2%
2003	2,029	5,940	292.8%
2004	7,283	7,412	101.8%
2005	9,435	11,241	119.1%
2006	7,994	15,812	197.8%
2007	6,593	23,327	353.8%
2008	4,950	12,628	255.1%
2009	8,548	884	10.3%
2010	4,283	1,542	36.0%
2011	3,993		
2011 YTD (Jun)	3,993	-	0.0%
2011 YE Projected	3,993	3,993	100.0%
2012	2,941		

Program Ratios

Year	$/kWh Target	Actual	$/LT kWh Target	Actual	$/kW Target	Actual	Cost/Home
2000	$1.777	$2.270	$0.107	$0.137	$0	$0	$4,664
2001	$2.577	$2.389	$0.124	$0.115	$0	$0	$3,913
2002	$2.437	$2.261	$0.111	$0.103	$0	$0	$3,688
2003	$4.843	$1.202	$0.258	$0.060	$22,739	$14,280	$1,293
2004	$1.431	$1.574	$0.074	$0.082	$3,182	$3,503	$1,489
2005	$1.111	$1.098	$0.089	$0.101	$2,645	$5,377	$2,080
2006	$1.095	$0.361	$0.081	$0.024	$3,680	$1,625	$612
2007	$0.772	$0.092	$0.060	$0.007	$1,886	$528	$360
2008	$0.720	$0.549	$0.080	$0.035	$2,020	$1,648	$1,467
2009	$0.687	$3.194	$0.052	$0.224	$3,203	$6,387	$8,609
2010	$1.267	$1.431	$0.083	$0.114	$5,014	$3,385	$3,826
2011	$0.687		$0.054		$2,416		
2011 YTD (Jun)	$0.687		$0.054		$2,416		
2011 YE Projected	$0.687	$0.688	$0.054	$0.054	$2,416	$2,421	$2,505
2012	$0.734		$0.060		$1,722		

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - Residential New Construction

Budget/FTE:

2012 UI Labor .60 FTE includes field support, and data/financial administration
Reduced CEEF financial contribution to HERS rating lowering program costs
Decrease in incenitives for CAC due to cost effectiveness

Goal:

113 unit goal reflects program changes and current economic downturn
Continue to promote Zero Energy Homes Challenge to support higher performing homes

Cost/kWh (Cost/Unit):

Cost rates increase as production is reduced and concentration on higher performance homes.
Increase UI labor, and revised measure mix
113 unit goal is driven by available budget economic environment

Goal Setting Methodology:

Emphasis is on participation and the install of high performance measures with specific interest in ENERGY STAR Version 3.0, focus on Homes and building shell/envelope measures, HVAC, HVAC QIV, ductwork and domestic hot water heaters - Heat Pump Water Heaters, High Efficient Natural Gas and Solar Thermal

YGS Standard Filing Requirement

Residential New Construction

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	n/a	$ 15,195	$ 9,864	$ 34,580	$ 2,495	$ 4,990	$ 34,580	
Outside Service	n/a	n/a	n/a	$ 27,157	$ 2,419	$ 76,150	$ 1,308	$ 54,138	$ 6,150	
Materials & Supplies	n/a	n/a	n/a	$ 9	$ 9	$ 1,200	$ 20	$ 43	$ 1,625	
Incentives	n/a	n/a	n/a	$ 267,049	$ 422,541	$ 372,570	$ 83,252	$ 619,912	$ 442,145	
Marketing	n/a	n/a	n/a	$ 4,379	$ 3,173	$ 11,500	$ 464	$ 983	$ 11,500	
Administrative Expense	n/a	n/a	n/a	$ 729	$ 1,892	$ 4,000	$ -	$ -	$ 4,000	
Total				$ 314,517	$ 439,898	$ 500,000	$ 87,539	$ 680,066	$ 500,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goal	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	31,287	41,991	41,170	10,318	80,158	43,996	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	782,194	1,049,784	1,029,259	257,950	2,003,943	1,099,892	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	$ 10.05	$ 10.48	$ 12.14	$ 8.48	$ 8.48	$ 11.36	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	$ 0.40	$ 0.42	$ 0.49	$ 0.34	$ 0.34	$ 0.45	e=a/c
Total Gas Benefit	n/a	n/a	n/a	$ 684,673	$ 1,107,077	$ 790,643	$ 198,149	$ 1,539,363	$ 519,877	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	$ 2.18	$ 2.52	$ 1.58	2.26	2.26	$ 1.04	g=f/a
Homes Served	n/a	n/a	n/a	326	206	95	44	342	224	h
Lifetime Savings per Home (ccf)	n/a	n/a	n/a	2,399	5,096	10,834	5,863	5,863	4,904	i=c/h
Program Cost per Home	n/a	n/a	n/a	$ 965	$ 2,135	$ 5,263	$ 1,990	$ 1,990	$ 2,229	k=a/h
Benefit per Home	n/a	n/a	n/a	$ 2,100	$ 5,374	$ 8,323	$ 4,503	$ 4,503	$ 2,318	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	$ 250,000	$ 314,517	126%
2010	$ 250,000	$ 439,898	176%
2011 YTD (June)	$ 500,000	$ 87,539	18%
2011 YE projection	$ 500,000	$ 680,066	136%
2012	$ 500,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	150	326	217%
2010	101	206	204%
2011 YTD (June)	95	44	46%
2011 YE projection	95	342	360%
2012	224	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	37,800	31,287	83%
2010	30,194	41,991	139%
2011 YTD (June)	41,170	10,318	25%
2011 YE projection	41,170	80,158	195%
2012	43,996	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	945,000	782,194	83%
2010	754,853	1,049,784	139%
2011 YTD (June)	1,029,259	257,950	25%
2011 YE projection	1,029,259	2,003,943	195%
2012	1,099,892	n/a	-

CNG Standard Filing Requirement

Residential New Construction

Budget Projections	2006 Actuals	2007 Actuals	2008 Budget	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	n/a	$ 14,856	$ 8,465	$ 33,250	$ 1,015	$ 33,250	$ 33,250	
Outside Service	n/a	n/a	n/a	$ 258	$ 2,347	$ 53,305	$ 1,270	$ 53,305	$ 53,305	
Materials & Supplies	n/a	n/a	n/a	$ -	$ 9	$ 840	$ 15	$ 840	$ 840	
Incentives	n/a	n/a	n/a	$ 158,889	$ 409,069	$ 251,545	$ 230,642	$ 263,342	$ 251,545	
Marketing	n/a	n/a	n/a	$ 4,361	$ 1,839	$ 8,260	$ 396	$ 8,260	$ 8,260	
Administrative Expense	n/a	n/a	n/a	$ 583	$ 317	$ 2,800	$ -	$ 2,800	$ 2,800	
Total				$ 178,946	$ 422,046	$ 350,000	$ 233,338	$ 361,797	$ 350,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Goals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	27,705	39,202	27,797	14,389	22,311	29,480	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	692,626	980,060	694,916	359,716	557,750	736,990	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	$ 6.46	$ 10.77	$ 12.59	$ 16.22	$ 16.22	$ 11.87	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	$ 0.26	$ 0.43	$ 0.50	$ 0.65	$ 0.65	$ 0.47	e=a/c
Total Gas Benefit	n/a	n/a	n/a	$ 606,272	$1,033,548	$ 533,812	$ 276,322	$ 428,445	$ 354,593	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	$ 3.39	$ 2.45	$ 1.53	$ 1.18	$ 1.18	$ 1.01	g=f/a
Homes Served	n/a	n/a	n/a	116	152	64	117	181	107	h
Lifetime Savings per Home (ccf)	n/a	n/a	n/a	5,971	6,448	10,858	3,074	3,074	6,888	i=c/h
Program Cost per Home	n/a	n/a	n/a	$ 1,543	$ 2,777	$ 5,469	$ 1,994	$ 1,994	$ 3,271	k=a/h
Benefit per Home	n/a	n/a	n/a	$ 5,226	$ 6,800	$ 8,341	$ 2,362	$ 2,362	$ 3,314	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	$ 250,000	$ 178,946	72%
2010	$ 250,000	$ 422,046	169%
2011 YTD (June)	$ 350,000	$ 233,338	67%
2011 YE projection	$ 350,000	$ 361,797	103%
2012	$ 350,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	150	116	77%
2010	101	152	150%
2011 YTD (June)	64	117	183%
2011 YE projection	64	181	283%
2012	107	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	37,800	27,705	73%
2010	30,194	39,202	130%
2011 YTD (June)	27,797	14,389	52%
2011 YE projection	27,797	22,311	80%
2012	29,480	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	945,000	692,626	73%
2010	754,853	980,060	130%
2011 YTD (June)	694,916	359,716	52%
2011 YE projection	694,916	557,750	80%
2012	736,990	n/a	-

SCG Standard Filing Requirement

Residential New Construction

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	n/a	$ 9,864	$ 5,842	$ 33,250	$ 1,131	$ 7,131	$ 33,250	
Outside Service	n/a	n/a	n/a	$ 178	$ 2,205	$ 45,690	$ 1,202	$ 7,202	$ 45,690	
Materials & Supplies	n/a	n/a	n/a	$ -	$ 9	$ 720	$ 15	$ 720	$ 720	
Incentives	n/a	n/a	n/a	$ 174,098	$ 84,790	$ 210,860	$ 197,295	$ 220,095	$ 210,860	
Marketing	n/a	n/a	n/a	$ 3,371	$ 1,336	$ 7,080	$ 266	$ 7,080	$ 7,080	
Administrative Expense	n/a	n/a	n/a	$ 401	$ 152	$ 2,400	$ -	$ 2,400	$ 2,400	
Total				$ 187,911	$ 94,334	$ 300,000	$ 199,909	$ 244,628	$ 300,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	20,308	9,381	23,301	1,212	1,483	24,796	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	507,718	234,532	582,520	30,300	37,078	619,898	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	$ 9.25	$ 10.06	$ 12.87	$ 164.94	$ 164.94	$ 12.10	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	$ 0.37	$ 0.40	$ 0.52	$ 6.60	$ 6.60	$ 0.48	e=a/c
Total Gas Benefit	n/a	n/a	n/a	$ 444,418	$ 247,332	$ 447,473	$ 23,275	$ 28,482	$ 298,256	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	$ 2.37	$ 2.62	$ 1.49	$ 0.12	$ 0.12	$ 0.99	g=f/a
Homes Served	n/a	n/a	n/a	71	32	54	2	2	90	h
Lifetime Savings per Home (ccf)	n/a	n/a	n/a	7,151	7,329	10,787	15,150	15,150	6,888	i=c/h
Program Cost per Home	n/a	n/a	n/a	$ 2,647	$ 2,948	$ 5,556	$ 99,955	$ 99,955	$ 3,333	k=a/h
Benefit per Home	n/a	n/a	n/a	$ 6,259	$ 7,729	$ 8,287	$ 11,638	$ 11,638	$ 3,314	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	$ 250,000	$ 187,911	75%
2010	$ 250,000	$ 94,334	38%
2011 YTD (June)	$ 300,000	$ 199,909	67%
2011 YE projection	$ 300,000	$ 244,628	82%
2012	$ 300,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	150	71	47%
2010	101	32	32%
2011 YTD (June)	54	2	4%
2011 YE projection	54	2	5%
2012	90	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	37,800	20,308	54%
2010	30,194	9,381	31%
2011 YTD (June)	23,301	1,212	5%
2011 YE projection	23,301	1,483	6%
2012	24,796	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	945,000	507,718	54%
2010	754,853	234,532	31%
2011 YTD (June)	582,520	30,300	5%
2011 YE projection	582,520	37,078	6%
2012	619,898	n/a	-

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Home Energy Solutions (Electric and Natural Gas)

Objective:

Home Energy Solutions ("HES") is the flagship residential retrofit program serving all existing residential structures including single and multi-family properties. The objective of the HES program is to reduce total residential energy use through the comprehensive treatment of all single-family and multi-family residential dwellings. HES will be the primary vehicle which will be used to fulfill the State of Connecticut's goal of weatherizing 80 percent of existing homes by 2030 per Public Act No.11-80, Section 33.

Beginning in 2011, the existing limited income programs (formerly called WRAP and UI Helps) were combined under the Home Energy Solutions program umbrella. The Home Energy Solutions Income Eligible tract ("HES-IE") serves customer who are at or below sixty (60) percent of the state's median income. Also, the stand-alone Heating Ventilation and Cooling ("HVAC") and retrofit geothermal equipment and HVAC Quality Installation and Verification ("QIV") rebates are included under HES. This makes HES an inclusive program to provide comprehensive weatherization and energy efficiency services to all existing residential customers regardless of income.

Target Market:

The target market for HES is all residential customers including single and multi-family properties. Eligible electric and natural gas customers will typically have either electric or natural gas space heat. The Companies may establish high energy-use criteria based on normalized energy usage in order to target high-use customers and maximize cost effective savings.

Program History: (HES)

The Home Energy Solutions Program as it is known today began in 2006 as the Electric Distribution Companies' Energy Efficiency Fund conservation duct sealing pilot. Later that year, the three natural gas companies (Yankee Gas, Connecticut Natural Gas, and Southern Connecticut Gas) began implementing the General Weatherization Program ("GWP") in conjunction with the electric duct sealing pilot to provide customers a one stop shop approach for comprehensive duct sealing, weatherization and other energy saving measures. In 2006, more than 2,000 customers were served through these combined efforts.

In 2007, HES continued to evolve serving over 5,200 customers and received national recognition by the American Council for an Energy Efficient Economy ("ACEEE").

In 2008, the Companies developed formal training and vendor certification, (Building Performance Institute Building Analyst I), and introduced outside financing into the program to encourage homeowners to take more comprehensive efficiency measures.

In 2008, the Department of Public Utility Control (now known as PURA), established a formal HES Working Group consisting of representatives from the participating utilities, HES vendors, the EEB, and other interested parties.[9] The working group first met on February 24, 2009. During this initial meeting, the group developed a mission statement: *minimizing total energy consumption and peak demand by maximizing energy efficiency in residential structures.* By 2009 the program had grown to 19 vendors with over 200 technicians serving customers.

In early 2009, President Barack Obama and the U.S. Congress passed the American Recovery and Reinvestment Act ("ARRA") which, in part, provided federal stimulus dollars to States that initiate energy conservation programs to benefit customers. Through the State Energy Program ("SEP"), the Department of Energy made ARRA funding available to the Connecticut Office of Policy and Management ("CT-OPM") to support existing Fund programs administered by the Electric and Natural Gas Companies. These funds were granted to the Electric Companies and have been used for the Home Energy Solutions program. For Home Energy Solutions, ARRA funds have allowed fuel oil and propane-heated homes to participate in the program for the same $75 co-pay and receive the same level of core services that the Electric and Natural Gas Companies' customers receive. From December 2009 – December 2010 the Companies have been able to allocate over $6.0 million of these funds into fossil fuel homes. In 2011 the Companies received another $2.4 million to perform energy efficiency services in oil and propane heated homes through Home Energy Solutions.

In late 2010, a Request for Proposal (RFP) was issued to select vendors for the 2011 HES program. The RFP set minimum qualification criteria including cost for services, technical certifications, state licensure, registration with the Connecticut Department of Consumer Protection as a Home Improvement Contractor, mandatory equipment to be used in customer homes, network of third party contractors to implement energy efficiency measures, back office infrastructure and overall experience. There were 48 vendor responses and 26 companies selected to serve in the 2011 program. It is estimated that over 300 jobs in Connecticut are directly attributed to the HES Program while there are numerous sub-contractors in the HVAC, insulation, and home improvement trades that benefit from the HES program by performing energy efficiency upgrades. Therefore, HES continues to provide both energy savings to customers as well as economic development through job creation and retention throughout Connecticut.

Program History (HES-IE):

For over twenty years the EDCs and LDCs have offered energy efficiency services to limited income customers who heat their homes with electric or natural gas. Early services included weatherization and appliance replacement (refrigerators and room air conditioners). The Energy Efficiency Fund program coordinates with and leverages funds received by the state of Connecticut from the U.S. Department of Energy's Weatherization Assistance Program (WAP).

[9] Docket No. 08-10-03. DPUC Review of the Connecticut Light and Power Company and The United Illuminating Company's Conservation and Load Management Plan.

In 2009 the state of Connecticut received $65 million in ARRA Funds to support the state's WAP efforts. This influx of funds increased weatherization funds allocated for limited income residents twelve (12) fold. The $65 million has an end spending date of March 2012. The Companies, in conjunction with the Community Action Agencies (CAA), Connecticut's Department of Social Services and DEEP have worked cooperatively to ensure that these federally allocated funds are spent on the most cost-effective measures and serve as many Connecticut residents as possible.

Through this effort the Companies have worked with the U.S. Department of Energy to have ductless split heat pumps as an approved technology supported by ARRA and the Energy Efficiency Fund to have more than 3,000 ductless split heat pumps installed in all electric heated residential dwellings. Promoting and installing this technology benefits Connecticut's limited income residents the most by reducing energy usage and making their homes more comfortable.

Additionally, the Companies have worked closely with Department of Social Services to ensure that the ARRA funds are spent as they are intended. Efforts include establishing appropriate level of cost sharing between the ARRA funds and the Energy Efficiency Fund. The Companies have provided customer leads, technical services and cost analysis to the CAAs to ensure the timely and appropriate expenditure of ARRA funds.

The HES-IE component of the program may be targeted to customers with the following criteria: (a) income that is at or below sixty (60) percent of the state median income, (b) energy burden (percent of total annual income spent on energy) that is high, (c) have not received energy conservation services in the prior eighteen (18) months, and (d) target customers who reside within Community Reinvestment Act areas and their eligible census tracts. The Electric and Natural Gas Companies can also target financially challenged customers facing other issues that may interfere with their ability to take advantage of conservation services. Examples of these customers include group living settings such as residential treatment facilities, group homes, halfway houses, disabled veterans groups, not for profit agencies who offer housing to disadvantaged residents and shelters.

The objectives of the Electric and Natural Gas Companies' income-eligible program is to provide comprehensive weatherization, energy conservation and education services to limited-income customers in order to reduce their energy burden; to make utility bills more affordable and homes more energy-efficient and comfortable; and to provide energy efficiency education to raise customer awareness of conservation and to encourage those customers to take behavioral and other steps beyond weatherization.

The Electric and Natural Gas Companies coordinate their program services to limited-income communities through their vendor network and/or the local CAA. This coordination enables the Electric and Natural Gas Companies to provide comprehensive services and maximize outreach to serve more families and has recently been recognized by the U.S. Department of Energy as a strong model of program delivery.

Program Description:

a) Core Services

The largest component of HES is the "Core Services" or "In-Home Services". The objective of Core Services is to identify comprehensive cost effective energy conservation opportunities in single family homes and educate and communicate these opportunities to the homeowner. HES does so by providing initial diagnostic testing and evaluation of homes. In addition to testing and evaluation services, cost-effective measures including blower door guided air sealing, duct sealing, installation of CFLs, domestic hot water measures, and pipe insulation are installed as part of Core Services.

The following is a summary of HES and HES-IE Core Services measures that are provided:

- Blower door guided air sealing
    - A blower door test is a diagnostic tool that measures the amount of air infiltration or "draftiness" of a home. The test produces a partial vacuum in the house and measures the number of cubic feet per minute ("CFM") leakage. The vacuum helps locate air leakage sites that may be sealed during the HES visit. A "before" and "after" reading is used to measure the total reduction in leakage in homes. The reduction in leakage translates directly to energy savings.
- Duct sealing
    - An Air flow test or heat rise test is performed to determine if it is appropriate to seal ducts based on the system air flow. If appropriate, a fan called a "ductblaster" is used to measure the amount of air leaks through the duct system that can be sealed with UL-rated adhesive products. Similar to the blower door, "before" and "after" measurements are taken to quantify the leakage reduction.
    - As Duct Sealing is required in both HES and HES-IE the Community Action Agencies (CAA) that perform WAP and HES-IE services do not perform Duct Sealing. The Companies will require duct sealing by the CAAs in 2012.
- Installation of CFL bulbs per HES guidelines and approved by customer
    - Currently, HES allows the installation of up to 10 common CFL bulbs and 15 specialty bulbs. For HES-IE, CFL bulbs are installed in all available sockets.
- Installation of water measures (low flow showerheads and aerators)
- Installation of pipe insulation for hot water piping
- An important part of the Core Services visit for both HES and HES-IE customers is the educational information provided to customers during the part of the visit called the Kitchen Table Wrap-up. Participants are presented with a "toolkit" that includes information such as conservation tips, CFL disposal, renewable energy opportunities, internet resources, etc.

- As part of HES core services, customers are provided rebates on various add-on measures including rebates for HVAC and appliance replacement, insulation, and window upgrades. (See rebate tables)
- Customers that qualify for HES-IE do not receive rebates, but may qualify for additional measures including insulation, refrigerator replacement, dehumidifiers, ductless split heat pumps and heat pump water heaters. These energy efficient measures are generally provided at no cost to customers however there may be some customer contribution required in some cases in order to maintain program cost effectiveness.

b.) Add-On Measures

- During the kitchen table wrap-up, opportunities for savings beyond HES Core Services are identified by the technician and communicated to the customer. In 2010, the Companies enhanced the wrap-up experience for HES with the creation of a Home Energy Yardstick (HEY) tool. The tool provides payback and investment information to customers to help them make decisions on purchasing and implementing additional energy efficiency and conservation measures, including insulation upgrades, HVAC replacements, window replacements and appliance upgrades.
- Fund subsidized low-interest financing with on-the-bill repayment is also available to HES customers to help encourage the investment of various energy efficient improvements recommended but not included in the core services. (See Chapter 5 for details.)

c.) HVAC (Heating, Ventilating and Air Conditioning)

The heating and cooling system efficiency component of HES provides incentives to increase heating and air conditioning equipment efficiency and to improve system installation quality. Induced replacement, i.e., retirement of older, inefficient equipment is a key market strategy. Proper performance and efficiency of central air conditioners and heat pumps is linked directly to the design and installation of the system.

The Companies offer a Residential Quality Installation Verification ("QIV") through the HES-HVAC program which is a requirement for HES financing of HVAC measures. The residential QIV of ducted air conditioning, heat pump and natural gas furnace installations offers a financial incentive for the commissioning and documentation of performance through field testing. The QIV component is based upon the ACCA[10] Standard 9 HVAC Quality Installation Verification Protocols. This standard establishes minimum requirements for verifying that residential and light commercial HVAC systems meet the ANSI[11]/ ACCA 5 QI – 2010 (HVAC Quality Installation Specification) standard. The ACCA Standard 5 details minimum criteria for the correct installation of HVAC equipment.

[10] Air Conditioner Contractors of America

[11] American National Standards Institute

The QIV offering focuses on the proper design and installation of HVAC systems. The required process addresses equipment sizing, ductwork and refrigerant charge. QIV is a commissioning process that begins with system design verification and ends when installed systems are tested and verified to match provided HVAC system plans. The passing QIV certificate, all records pertaining to the HVAC system installation, operation and maintenance records, "as -built" documents, manufacturers' technical documents and warranties must be provided. In order for customers to receive financing through EEF for HVAC systems QIV is mandatory. Contractors receive training and site assistance for performing QIV and are listed on the companies' websites. Training of the HVAC trades is a critical measure in the development of the QIV program in Connecticut.

The Residential Geothermal Verification of Installed Performance (VIP) for ground source heat pump ("GSHP") installations offers a financial incentive for commissioning and documentation of performance through field testing. Customers installing geothermal systems will be required to participate in either the Residential New Construction Program or HES (or have a comparable energy assessment service to ensure that all cost-effective shell upgrades are made prior to the geothermal installation).

The Residential Ductless Heat Pump ("DHP") initiative promotes the replacement of residential electric heat with ductless heat pumps. DHPs utilize an efficient technology that can be used as a cost effective heating and cooling option in a variety of residential situations. They have an impressive track record in Japan and to a lesser degree in small commercial application in the United States. Technological enhancements have greatly improved the efficiency of DHPs through the use of inverter technology. Inverter technology allows systems to run at more efficient partial load conditions rather than cycling on and off. Much like an automobile, constant speed operation of heat pumps is more efficient than "stop and go" operation. As a result of the inverter technology, DHPs are typically 10 to 30 percent more efficient than standard heat pumps. The Ductless Heat Pump Initiative fosters awareness and adoption of ductless heat pumps as a measure to reduce energy consumption. Qualified residential customers will receive a financial incentive for having a ductless heat pump installed by an approved contractor. A higher incentive is available for a home which utilizes electric resistive baseboard or heat panels as its heating source. A lower incentive will be available to other installations including, but not limited to, those in fossil fuel homes, basement remodels, and additions. The program contains a strong educational component which provides training assistance to HVAC contractors. In addition, participating customers are provided support to ensure that they understand the operating characteristics of Ductless Split Heat Pumps and routine maintenance procedures.

d.) Multi-Family Initiative ("MF")

The Multi-Family initiative captures measures and savings that are currently being provided under various C&LM offerings but not clearly identified as MF projects. The MF initiative serves any type of multi-family property including assisted living facilities, dorms, group homes, apartment complexes high-rise dwellings and mixed-use developments.

The Companies will continue to expand its services available to MF projects by specifically inserting a MF aspect into current program offerings. To the extent possible, the initiative will utilize existing gas and electric C&LM programs including commercial and industrial offerings. MF Initiative removes barriers and offers customers a "one-stop" approach by having a single Program Administrator ("PA") serve as the primary contact for customers to help facilitate the process and package the project making participation seamless.

In addition, other state and federal programs will be leveraged wherever possible. These may include other rebate programs such as State or Clean Energy Fund offerings, or local or federal tax credits.

e.) Consumer Financing

HES provides attractive third-party consumer financing for energy improvement projects recommended and/or offered through HES. In addition to the Energy Conservation Loan program offered through CHIF, the Companies, through a competitive bid process, sought out other financing mechanisms for residential consumers. A Residential Financing Pilot program was initiated on June 1, 2010 and continued through May 31, 2011. The pilot program offered loans at attractive below market interest rates. The pilot also allowed The Companies to engage the customer and contractor/vendor in a new way by helping reduce a barrier to deeper energy efficiency. The Residential Financing Pilot successfully funded loans to over 1,250 loans funded and over $14.5 million in energy efficiency home improvements.

Although the pilot was successful, the Companies, in conjunction with the EEB, sought alternative financing models to reduce the costs to the Fund. On June 1, 2011 The Companies began an expanded relationship with CHIF to offer a residential financing program in place of the Residential Financing Pilot program. This program will offer cost-effective financing for specific energy efficiency measures. This program will be one of the first in the nation to offer on bill repayment of energy efficiency measures for residential customers.

CL&P's new residential loan program is administered by CHIF and the Connecticut Energy Efficiency Finance Company ("CEEFCO"), a 501 (c)(3) Special Purpose Entity set up to administer the loan program and leverage Connecticut Energy Efficiency Fund monies. UI's residential loan program is administered by CHIF and funded by UI capital.

To qualify for the subsidized interest rates and obtain a loan, a customer must participate in the HES program through an Energy Efficiency Fund-approved HES contractor. All measures or equipment financed must meet energy efficiency criteria including the HES participation criteria.

For more information on the financing programs, please refer to Financing in Chapter 5.

f.) Home Performance with ENERGY STAR®

In late 2009 the Companies applied to the U.S. EPA Home Performance with ENERGY STAR Program to have HES recognized as a program participant. Based on HES' current program offering and the promotion of comprehensive services and measures, HES met the criteria and in early 2011, Connecticut was recognized as a U.S. EPA Home Performance with ENERGY STAR state.

This program element is designed to encourage and enable customers to complete comprehensive projects tailored to meet their individual needs. The first step in Home Performance is an initial analysis of the home including potential energy efficiency custom upgrade(s). The cost and energy savings for these custom projects will be reviewed by the Companies. Billing histories and comparing savings calculations to acceptable engineering practice will be considered during the review process. Once cost and savings estimates are finalized, a letter of agreement will be executed containing the incentive information. Customers will be paid once the project is completed and inspected by a company representative.

Home Performance is similar in design to the commercial & industrial retrofit energy efficiency programs, but accepts residential and multi-family projects into the program through letters of agreement with contractors. Home Performance projects may utilize other programs and offerings (e.g., commercial & industrial electric and natural gas Fund programs, tax credit programs, etc.) to deliver more comprehensive services to customers with potential attractive financing options.

Home Performance also allows for the transition of HES to a market based program while retaining the QA/QC oversight that is required for the U.S. EPA's program. Contractors and vendors that meet the HES certifications and requirements will be eligible to access incentives from the Fund. This path of customer participation allows for a more comprehensive approach rather than the current prescriptive approach for energy efficiency upgrades. Looking at incentives in terms of measure performance and incorporating low interest financing allows Fund resources to be utilized in housing stock that would most benefit from efficiency upgrades with low interest financing.

New Program Issues:

Public Act No. 11-80 sets a goal of weatherizing eighty percent of Connecticut homes by 2030. Based on the age distribution of housing in Connecticut and characterization of the efficiency of existing homes, it is estimated that approximately one-half million homes will need to be weatherized in order to reach this goal. This amounts to approximately 26,000 homes per year for nineteen (19) years to reach

this goal. HES will serve as the gateway for the state to accomplish this goal by 2030. The Companies in coordination with the EEB and DEEP will define weatherization and residential dwellings. Once these definitions are established the services of HES will deliver to Connecticut residents weatherization services and measures that will meet the state's 2030 goal.

Since the program's inception and with the inclusion of the HES-Income Eligible track, the Companies, in consultation with the HES Working Group and the EEB consultants, have developed the infrastructure necessary to fulfill the weatherization goal outlined in Public Act No. 11-80. As such, the Companies have been striving to make HES a comprehensive, whole-home solution that encourages and enables all possible energy efficiency upgrades through a combination of financial incentives and attractive financing. The approach of financial incentives and low-cost, low interest financing will be the recipe to moving Connecticut to its 2030 goal.

Over half, or approximately 700,000 households in Connecticut heat with fuel oil or propane (based on U.S. Department of Energy Data). A disproportionate amount of these homes are large single-family homes and they represent a population that has historically been underserved by conservation program efforts due to the lack of a funding source similar to that of electric and natural gas for fuel oil measures and services. While these customers pay the electric system benefit charge of 3 mils, there is no contribution based on their heating fuel choice. Therefore, the overall cost of non-electric measures is greater than the benefit they provide based on electric savings. Electric rate payers cannot contribute disproportionally to oil use measures such as the blower door test and air sealing, duct test and sealing, and domestic hot water measures. The electric dollars spent on these measures outweigh the electric benefit to the program, even though the overall savings, including savings on oil, is greater than the cost.

Public Act 11-80 sets a statewide limit of $500,000 which can be used to support oil heating measures. In the 2011 decision in Docket 10-10-03, the DPUC authorized the use of some of the Regional Greenhouse Gas Initiative funding to support oil heating measures. This level of funding will result in the state failing to reach its weatherization goal. Therefore, oil heating funding of approximately $17 million dollars annually will be necessary to support the weatherization goal outlined in Public Act No. 11-80. Absent these dollars, the Companies will have to reduce program services to oil heated homes in order to comply with the spending cap. However, a significantly lower level of services will no doubt lead to dramatically lower customer satisfaction and participation in the program.

The avoided costs that are used to screen the Energy Efficiency Fund measures and programs have been updated for 2012 (See Chapter 6) and have changed significantly. Both the electric and natural gas avoided costs have dropped significantly due mainly to reduced assumptions regarding the future cost of natural gas. In particular, electric avoided costs have decreased approximately 19 percent and avoided natural gas avoided costs have decreased approximately 40 percent. The reduction in avoided costs may require higher co-payments for both electric and natural gas homes and/or homes may have to be pre-screened in order to identify higher-use homes that are more likely to have cost effective

savings opportunities. Likewise, homes with lower consumption and less cost effective savings opportunities will either not be served or they will require a higher customer co-payment.
Some measures in HES have both electric and fossil fuel savings (e.g., duct sealing). For those measures, electric and fossil fuel cost splits are applied to determine what percentage of those measures' costs are paid for from electric funds and what percentage of the measure is allocated to fossil fuel (natural gas or fuel oil funding). While both the electric and natural gas avoided costs have decreased for 2012, the decrease in natural gas avoided costs (40 percent) is more than double the decrease in electric avoided costs (19 percent). Therefore, the measure cost percentages that are used to allocate the program costs across fuels are updated for 2012 to reflect the new avoided costs.

The long-term goal of HES, and what is meant by market based, is to shift from an efficiency program that is dependent on utility customer funding to a self-sustaining industry that can be leveraged by the Energy Efficiency Fund. Therefore, the future of HES will look more like other efficiency program offerings such as Small Business, Retail Products or the HVAC rebate programs. These Energy Efficiency Fund offerings are built on existing private market channels, but they do not define the market.

In an effort to meet the long-term goals of HES and to help meet the weatherization goal set forth in Public Act 11-80, the Companies, in consultation with the PURA, EEB and the HES Working Group, will be phasing in the following program enhancements for 2012:

- In the 1st Quarter 2012, the Companies plan to pilot with the HES vendors various strategies to target oil heated homes to offer the same HES core services as directed in Public Act 11-80. In order to be cost-effective, oil furnace heated homes with central air conditioning and electric domestic hot water will be targeted. However other approaches will be piloted including an initial visit that could consist of diagnostic tests and providing oil customers with an energy assessment report highlighting areas of the home to be addressed. During this visit CFLs and domestic hot water measures will be installed. Piloting various approaches will need to balance cost effectiveness while not diluting the success of providing direct install measures at the time of the home visit.
- Implementing a comprehensive QA/QC protocol which includes quarterly ranking of vendors based on performance, energy savings and customer satisfaction.
- Increase timely communication to vendors relative to their performance and how the vendors rank relative to their peers.
- Establish partnership with CCEF and the municipal Energy Task Forces and Green Communities to promote HES.
- Increased focus on deeper, more comprehensive "packaged" measures to promote deep and meaningful savings goals (20-25%) through energy efficiency and load management that will help all customers have a real impact on their energy bills, contribute to their carbon footprint, and enhance their awareness of weatherization;

- Achieve large increments of efficiency through High-Performance HVAC system upgrades, advance Air and Duct sealing techniques, along with other weatherization improvement measures
- Support customers in making energy management an integral part of their home practices and promote a behavioral change culture towards conservation
- Multi-touch approach to encouraging upgrades and/or future rebated efficiency measures.
- Increased data gathering for analysis, which will be useful in meeting the PA 11-80 goal of weatherizing eighty (80) percent of homes by 2030.

Public Act 11-80 also calls for programming that allows residents to switch from electric heat to efficient natural gas or fuel oil heating systems to reduce resident's energy costs and lower operating costs. The Companies are poised to collaborate with PURA and DEEP to create programming that would provide financial incentives and cost effective financing to help residents make the switch.

Marketing

As the HES program has matured, the Companies rely more upon contractor-generated marketing to drive customer enrollment. The Companies may augment enrollment with:

- Bill inserts.
- Telemarketing.
- TV, Radio or Print media campaign.
- Targeted direct mail or direct e-mail of program benefits.
- Special-interest publications (print and electronic) such as Company newsletters, legislator's constituent newsletters and government employee newsletters to direct residents to the WISE-USE line or CTEnergyInfo.com for applications.
- Presence at strategically selected consumer shows and residential fairs.
- Promotion through HVAC, insulation and fuel oil delivery companies.
- Web Links from the Companies websites to the approved HES vendors/contractors web sites.
- Leverage and promote the Clean Energy Communities program.

To maximize the benefits of HES services provided and to encourage favorable behavioral changes, the Companies will assist residents through education and support.

This support may include:

- Development and distribution of articles on low-cost or no-cost energy efficiency tips. Placement in newsletters, local media, and associated web sites sponsored by groups such as the EEB, the CCEF, legislators' sites, and conservation sites, etc.
- Write and distribute case studies (also referred to as Success Stories or Testimonials) to the sites listed above and to local media.

- Produce video(s) for HES, post video segments on the Companies' sites and link from other affiliated/appropriate sites. Explore use of Local Access TV.

To help move HES towards a market based program and to reduce program costs, HES vendors are encouraged to market their services to customers. HES vendors are also the primary communications channel for promoting add-on or "non-core" measures such as upgrades to appliances and insulation -- utilizing Fund-supported rebates. The Companies provide the vendors with a variety of collateral pieces that support these measures and also engage in public relation activities that create awareness and a more effective climate for the vendors. HES vendors are also the primary promoter of the residential loan initiative.

The Companies have developed marketing guidelines that vendors must adhere to when marketing Energy Efficiency Fund programs or offerings. The Energy Efficiency Fund encourages its partners and vendors to align their promotional efforts with a campaign that supports awareness of the Energy Efficiency Fund while maintaining established marketing regulations and standards. By using advertising that promotes HES and the Energy Efficiency Fund, vendors can deliver consistent messaging to customers and demonstrate to customers that they offer quality solutions.

As administrators of the programs, the Companies must approve submissions for all advertising in all media including all printed pieces, mailers, television, radio and internet. The Companies provide each partner with the appropriate logos and copy points as requested. Partners must use these logos and copy points in the manner directed by the Company's advertising coordinators. Once the logos are placed in any advertisement, they must be submitted to the advertising coordinator for approval, BEFORE they are released to the media outlet. Any advertisement released without approval will be construed as a misrepresentation of the programs and the Energy Efficiency Fund.

The Companies reserve the right to deny creative execution or any element of advertising/direct marketing containing any utility company logo or the Energy Efficiency Fund's products, logo or name if any element is deemed inappropriate. CL&P and UI reserve the right to reject any advertising if it is found that the vendor is not performing services as directed or intended by Energy Efficiency Fund/Companies as it pertains to HES and or Energy Efficiency Fund programs.

Incentive Strategy:

The incentive strategies for HES are multifaceted due to the various components of the program and the markets served. HES Core Services will resemble the 2010 and 2011 HES program with fixed products and services and established program limits. In 2010 The Companies increased the total number of CFLs to 25 and that limit will remain in 2012. The Companies will continue to monitor whether or not program limits and fees are appropriate and adjust accordingly to ensure cost-effectiveness, maintain sufficient program participation levels, are affordable to customers, sustainable, and deliver energy savings to customers. In 2012, in order to reduce market confusion, the Companies

will continue to require a customer co-pay of $75 and vendors are not to deviate from the $75 co-pay for standard HES in-home services.

Home Performance with ENERGY STAR will establish an incentive/rebate structure that will encourage customers to pursue deeper retrofits and increase the penetration rate of insulation and appliance upgrades. This incentive structure supports a whole house approach to achieve greater electric and natural gas savings.

Home Performance with ENERGY STAR will allow the Companies to establish a network of contractors that will operate within HES and receive incentives for customers based on the cost-effectiveness of the scope of work presented. Customers will be eligible to receive HES core services as a bundled project of additional energy efficiency upgrades. Contractors will utilize the Companies HEY Tool to provide a summary of the measures to be installed and upgrades to follow. The Companies will screen these products and provide an incentive to the customer based on energy savings.

The following tables show the funding sources for measures and the incentive amounts for rebates/measures.

HES CORE SERVICES FUNDING SOURCES

Measure	Fuel Source					Incentive Amount
	All Electric	Gas Heat with Central Air	Gas Heat w/o Central Air	Fuel Oil/Propane Heat* with Central Air	Fuel Oil/Propane Heat* w/o Central Air	
Administration	Electric	40/60 Electric/Gas	40/60 Electric/Gas	30/70 Electric/Fuel Oil-Propane	20/80 Electric/Fuel Oil-Propane	$75 co-pay or TBD
Blower Door Test/Air Sealing	Electric	15/85 Electric/Gas	Gas	10/90 Electric/Fuel Oil-Propane	Fuel Oil-Propane	Measures included with Core service
Air Flow and/or Heat Rise Test	Electric	10/90 Electric/Gas	Gas	10/90 Electric/Fuel Oil-Propane	Fuel Oil-Propane	
Duct Blaster/Duct Sealing	Electric	60/40 Electric/Gas	35/65 Electric/Gas	50/50 Electric/Fuel Oil-Propane	20/80 Electric/Fuel Oil-Propane	
Installation of CFLs	Electric	Electric	Electric	Electric	Electric	
Domestic Hot Water Measures	Electric	Gas or Electric	Gas or Electric	Fuel Oil-Propane	Fuel Oil-Propane	
Pipe Insulation/Hot Water Heater	Electric	Gas or Electric	Gas or Electric	Fuel Oil-Propane	Fuel Oil-Propane	

* Fuel Oil/Propane cost splits assume the availability of Fuel Oil/Propane funding.

CORE SERVICES REBATES FUNDING SOURCES

Incentive	Fuel Source					Incentive Amount
	All Electric	Gas Heat with Central Air	Gas Heat w/o Central Air	Fuel Oil/Propane Heat* with Central Air	Fuel Oil/Propane Heat* w/o Central Air	
Insulation Rebates	Electric	10/90 Electric/Gas	Gas	5/95 Electric/Fuel Oil-Propane	Electric/Fuel Oil-Propane	Up to .50/sq.ft. not to exceed 50 percent of install cost
ENERGY STAR Clothes Washer Rebates	Electric	By DHW fuel source Gas or Electric	By DHW fuel source Gas or Electric	By DHW fuel source	By DHW fuel source	$50 mail in rebate
ENERGY STAR Freezer Rebates	Electric	Electric	Electric	Electric	Electric	$25 mail in rebate
ENERGY STAR Refrigerator Rebates	Electric	Electric	Electric	Electric	Electric	$50 mail in rebate
ENERGY STAR Dehumidifier Rebates	Electric	Electric	Electric	Electric	Electric	$25 mail in rebate
ENERGY STAR Window Rebates	Electric	Gas	Gas	Fuel Oil-Propane	Fuel Oil-Propane	$50/single pane window not to exceed 50 percent of installed cost

* Fuel Oil/Propane cost splits assume the availability of Fuel Oil/Propane funding.

HVAC REBATES AND FUNDING SOURCES

Measure	Rebate Amount	Funding Source
ENERGY STAR Central Air Conditioner or Heat Pump (8.2 HSPF, 14.5 SEER, 12 EER for split systems; 8.0 HSPF, 14 SEER, 11 EER for single packaged systems	$250 per system	Electric
ENERGY STAR QIV Incentive	$500 per Home for AC or Heat Pump $100 per Home for Gas Furnace	Electric for AC or Heat Pumps QIV. Natural Gas for furnace QIV.
ENERGY STAR Ductless AC or Heat Pump (8.2 HSPF, 14.5 SEER, 12 EER)	$250 or $1,000** (for qualifying ductless heat pumps that will be displacing electric resistance heat)	Electric
Geothermal VIP incentive for units that meet ENERGY STAR 2012 criteria.	$500 per ton capped at $1,500	Electric
Natural Gas Furnace Rebate 95 percent AFUE and Air Handler Performance Level E_{EA} of 2 percent or lower.	$500 per system	40% Electric 60% Natural Gas
Early Retirement of Natural Gas Furnace Rebate 95 percent AFUE and Air Handler Performance Level E_{EA} of 2 percent or lower.	$800 per system **	25% Electric 75% Natural Gas
Natural Gas Boiler Rebate for 90 percent AFUE with temperature reset or purge control	$300 per system lost opportunity $600 per system early retirement	Natural Gas
Propane and Fuel Oil Furnace Rebate for ECM Fan Section 95 percent AFUE and Air Handler Performance Level E_{AE} of 2 percent or lower.	$200 per System	Electric
Natural Gas Tankless Water Heater ENERGY STAR 82 EF (Energy Factor) or greater with Electronic Ignition	$100 per system	Natural Gas
Propane and Fuel Oil Furnace and Boiler Rebates TBD based on availability of fuel oil/propane funding	TBD based on availability of fuel oil/propane funding	Fuel Oil/Propane
Package Terminal AC/HP Rebate 10 EER/2.8 COP to 12.5 EER/3.0 COP BTU size dependent	$150/system**	Electric

* The $250 Central Air and Heat Pump incentive can be doubled through HES to $500 for early retirement situations. In order to qualify for the $500 rebate, the new system must be replacing an existing system which is still operable and the home must receive HES Core Services at which time the HES technician provides verification that the existing system is operable. In addition, the customer must have the new Central Air or Heat Pump installed within 90 days of the HES Core Services initial visit.

** Customers must receive HES Core Services prior to the system installation.

HES-Income Eligible MEASURE FUNDING SOURCES

Measure	Fuel Source					Incentive Amount
	All Electric	Gas Heat with Central Air	Gas Heat w/o Central Air	Fuel Oil/Propane Heat with Central Air	Fuel Oil/Propane Heat w/o Central Air	
Administration	Electric	20/80 Electric/Gas	20/80 Electric/Gas	30/70 Electric/Fuel Oil-Propane	20/80 Electric/Fuel Oil-Propane	Minimum co-payment of 30% required. Pay only up to cost effective threshold.
Blower Door Test/Air Sealing	Electric	15/85 Electric/Gas	Gas	10/90 Electric/Fuel Oil-Propane	Fuel Oil-Propane	
Air Flow and/or Heat Rise Test	Electric	5/95 Electric/Gas	Gas	10/90 Electric/Fuel Oil-Propane	Fuel Oil-Propane	
Duct Blaster/Duct Sealing	Electric	60/40 Electric/Gas	35/65 Electric/ Gas	30/70 Electric/Fuel Oil-Propane	20/80 Electric/Fuel Oil-Propane	
Installation of CFLs	Electric	Electric	Electric	Electric	Electric	
Domestic Hot Water Measures	Electric	Gas	Gas	Electric	Electric	
Heat Pump Hot Water Heaters	Electric	Electric	Electric	Electric	Electric	
Pipe Insulation/Hot Water Heater	Electric	Gas	Gas	Electric	Electric	
Insulation	Electric	10/90 Electric/Gas	Gas	5/95 Electric/Fuel Oil-Propane	Fuel Oil-Propane	
Windows	Electric	Gas	Gas	Electric	Electric	Minimum co-payment of 30% required. Pay only up to cost effective threshold.
Refrigerator and Freezer Replacement	Electric	Gas	Gas	Electric	Electric	Co-payment of $100 required for landlords
HVAC including furnace and ductless heat pumps	Electric	Gas	Gas	Electric	Electric	Pay up to cost effective threshold. $545 furnace replacement co-pay may be provided by the program for ARRA/DOE funded projects.

* Fuel Oil/Propane cost splits assume the availability of Fuel Oil/Propane funding.

CL&P Standard Filing Requirement

Home Energy Solutions (HVAC, In-Home Services)

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor								
NU Labor	$ 467	$ 651	$ 869	$ 304	$ 842	$ 590		$ 590
Contractor Staff	$ 71	$ 329	$ -	$ 147	$ 300	$ 350		$ 350
Total Labor	$ 538	$ 980	$ 869	$ 452	$ 1,142	$ 940		$ 940
Materials & Supplies	$ 6	$ 5	$ 35	$ 6	$ 33	$ 25		$ 25
Outside Services	$ 1,496	$ 2,009	$ 2,878	$ 1,195	$ 2,736	$ 364	a)	$ 363
Incentives	$ 5,786	$ 14,597	$ 13,342	$ 8,055	$ 12,668	$ 9,996	b)	$ 9,972
Marketing	$ 66	$ 182	$ 480	$ 66	$ 465	$ 325		$ 324
Administrative Expense	$ 11	$ 20	$ 45	$ 14	$ 44	$ 32		$ 32
Other	$ 47	$ 16	$ 100	$ 22	$ 97	$ 75		$ 75
Total	$ 7,950	$ 17,809	$ 17,749	$ 9,810	$ 17,184	$ 11,757		$ 11,732

a) Implementation: Includes vendor administrative costs and rebate processing fees, CHIF Loan program.
b) Includes rebates for HVAC equipment including ductless split heat pumps and geothermal, appliances plus direct install measures including air sealing, duct sealing, lighting, and water measures.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	2,630.5
Annual Energy Savings (KWh Reduction Goal)	19,832,316
Lifetime Energy Savings (kWh Reduction Goal)	259,148,882
Annual Cost Rate ($/kWh)	$ 0.548
Lifetime Cost Rate ($/kWh)	$ 0.042
Electric b/c Ratio	1.59
Total Resource b/c Ratio	2.25

CL&P Standard Filing Requirement

Home Energy Solutions (HVAC, In-Home Services)

Program Costs

Year	Budget	Actual	% of Budget	Cost/participant	$/LT-kWh
2000	$ -	$ -	0%	$0	0.000
2001	$ 500,000	$ 262,000	52%	$488	0.096
2002	$ 660,000	$ 760,000	115%	$321	0.051
2003	$ 1,500,000	$ 1,086,000	72%	$659	0.101
2004	$ 1,500,000	$ 1,149,000	77%	$429	0.045
2005 Revised	$ 3,424,989	$ 1,686,246	49%	$456	0.049
2006 Revised	$ 2,922,000	$ 3,959,926	136%	$352	0.065
2007 Revised	$ 4,900,052	$ 5,467,875	112%	$1,071	0.061
2008 Revised	$ 7,000,000	$ 7,167,887	102%	$963	0.066
2009 Revised	$ 13,914,181	$ 17,809,102	128%	$1,453	0.209
2010 Revised	$ 17,809,102	$ 17,809,102	100%	$795	0.067
2011 Revised	$ 17,749,155	n/a	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 9,810,124	55%	$768	0.106
2011 Y/E Projected	$ 17,749,155	$ 17,183,815	97%	$673	0.083
2012	$ 11,757,050	n/a	n/a	n/a	n/a

Goal - Participation

Year	Goal	Actual	% of Goal
2000	0	0	0%
2001	1,269	537	42%
2002	1,423	2,366	166%
2003	16,372	1,647	10%
2004	2,029	2,677	132%
2005 Revised	4,525	3,700	82%
2006 Revised	9,341	11,237	120%
2007 Revised	4,877	5,106	105%
2008 Revised	11,584	7,446	64%
2009 Revised	18,991	12,257	65%
2010 Revised	25,958	22,410	86%
2011 Revised	29,737	n/a	n/a
2011 YTD (Jun)	n/a	12,766	43%
2011 Y/E Projected	29,737	25,532	86%
2012	21,301	n/a	n/a

Goal - Lifetime MWh savings

Year	Budget	Actual	% of Budget
2000	0	0	0%
2001	6,034	2,735	45%
2002	8,196	14,846	181%
2003	18,944	10,791	55%
2004	16,016	25,460	151%
2005 Revised	51,967	34,238	64%
2006 Revised	34,351	60,493	172%
2007 Revised	73,564	89,643	122%
2008 Revised	109,796	107,856	98%
2009 Revised	199,785	85,041	43%
2010 Revised	341,045	264,136	77%
2011 Revised	306,988	n/a	n/a
2011 YTD (Jun)	n/a	92,263	27%
2011 Y/E Projected	306,988	207,429	61%
2012	259,149	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	3,371	972	28.8%
2004	1,481	2,188	147.7%
2005	5,367	2,856	53.2%
2006 Budget	2,500	3,151	126.0%
2007 Revised	2,579	2,520	97.7%
2008 Revised	3,769	3,261	86.5%
2009 Revised	4,246	2,220	52.3%
2010 Revised	5,661	5,054	89.3%
2011 Revised	5,086	n/a	n/a
2011 YTD (Jun)	n/a	2,065	36.5%
11 Y/E Projected	n/a	3,973	70.2%
2012	2,631	n/a	n/a

Program ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2001	0.083	0.096	n/a	1002
2002	0.081	0.051	n/a	698
2003	0.128	0.101	721	1,117
2004	0.094	0.045	1,013	1,182
2005 Revised	0.066	0.049	638	590
2006 Revised	0.085	0.065	1,169	1,257
2007 Revised	0.067	0.061	1,900	2,169
2008 Revised	0.064	0.066	1,857	2,198
2009 Revised	0.085	0.209	3,277	8,023
2010 Revised	0.052	n/a	3,146	n/a
2011 Revised	0.058	n/a	3,490	n/a
2011 YTD (Jun)	n/a	0.106	n/a	4,750
2011 Y/E Projected	n/a	0.083	n/a	4,325
2012	0.045	n/a	4,469	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Home Energy Solutions (HVAC, In-Home Services)

Budget/FTE

4.4 FTE for program administration, vendor interaction, field inspections, program support.

Goal

21,301 Units serviced includes 16,571 in-home services jobs and 4,730 HVAC rebates.

Cost/Unit

$552 Average cost per unit.

Goal Setting Methodology

HVAC
In-home

Metric Changes

None

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Home Energy Solutions

Baseline Assumptions:

Market — Residential Customers and the replacement of HVAC equipment < 25 tons

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 237,971	$ 244,896	$ 138,203	$ 244,896	$ 271,894	a)	$ 285,489
Contractor Staff	$ -	$ -	$ -	$ -	$ -	b)	$ -
Total Labor	$ 237,971	$ 244,896	$ 138,203	$ 244,896	$ 271,894		$ 285,489
Materials & Supplies	$ 32,999	$ 4,759	$ 20,253	$ 20,253	$ 3,500	c)	$ 3,500
Outside Services	$ 406,012	$ 93,899	$ 144,962	$ 144,962	$ 60,452	d)	$ 60,500
Incentives	$ 4,558,370	$ 2,467,248	$ 1,749,127	$ 2,416,616	$ 1,835,212	e)	$ 1,807,351
Marketing	$ 92,052	$ 137,500	$ 83,104	$ 83,104	$ 100,500	f)	$ 100,500
Other	$ 12,274	$ -	$ 42,950	$ 42,950	$ -	g)	$ -
Administrative Expenses	$ 6,820	$ 12,479	$ 4,859	$ 8,000	$ 10,100	h)	$ 10,100
Total	$ 5,346,498	$ 2,960,781	$ 2,183,458	$ 2,960,781	$ 2,281,658		$ 2,267,440

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(1) HES includes Residential Loan Program

a) 2.65 FTEs
b) No comment
c) Printing of program rebate forms, table-top wrap up educational materials, etc.
d) In-home services audits for 2,468 homes, Processing fees for Program Rebates
e) In-home services measures for 2,468 homes plus 926 CAC, Geothermal, Heat Pumps and 44 Ductless Heat pumps (electric resistance replacement), appliance and insulation incentives (Clothes Washer, Refrigerator, Dehumidifier, Insulation, and Freezer) QIV subsides
f) Seasonal marketing and advertising and public relations, direct mail, and bill insert messaging
g) No comment
h) Meals, miles, travel and training

Goals and Metrics Information:

Savings	2012
Demand Savings (kW)	734
Annual Energy Savings (kWh)	3,515,822
Lifetime Energy Savings (kWh)	41,625,954
Annual Cost Rate ($/kWh)	$ 0.649
Lifetime Cost Rate ($/kWh)	$ 0.055
Cost per kW	$ 3,108
Electric System B/C Ratio	1.53
Total Resource B/C Ratio	1.99

The United Illuminating Company
LF-26 Standard Filing Requirement

Home Energy Solutions

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2001	$104	$229	220.2%
2002	$248	$286	115.3%
2003	$366	$268	73.2%
2004	$514	$423	82.3%
2005	$1,042	$673	64.6%
2006	$745	$784	105.2%
2007	$1,012	$1,079	106.6%
2008	$1,887	$2,067	109.5%
2009	$4,891	$3,090	63.2%
2010	$2,896	$3,883	134.1%
2011	$2,961		
2011 YTD (Jun)	$2,961	$2,183	73.7%
2011 YE Projected	$2,961	$2,961	100.0%
2012	$2,282		

Goal - Number of Units

Year	Goal	Actual	% of Goal Achieved
2001	250	176	70.4%
2002	235	804	342.1%
2003	500	610	122.0%
2004	634	745	117.5%
2005	3,400	1,533	45.1%
2006	840	1,051	125.1%
2007	525	1,025	195.2%
2008	525	2,336	445.0%
2009	4,694	3,252	69.3%
2010	3,073	5,412	176.1%
2011	3,528		
2011 YTD (Jun)	3,528	2,050	58.1%
2011 YE Projected	3,528	3,528	100.0%
2012	3,454		

Goal - Installed kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2001	62	75	121.0%
2002	58	1,216	2096.6%
2003	186	231	124.2%
2004	279	415	148.7%
2005	848	517	61.0%
2006	329	455	138.3%
2007	890	1,063	119.4%
2008	1,789	3,331	186.2%
2009	7,404	2,515	34.0%
2010	4,661	5,134	110.1%
2011	4,147		
2011 YTD (Jun)	4,147	1,818	43.8%
2011 YE Projected	4,147	4,147	100.0%
2012	3,516		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2001	-	-	0.0%
2002	-	-	0.0%
2003	345	368	106.7%
2004	491	728	148.3%
2005	1,490	1,061	71.2%
2006	595	631	106.1%
2007	528	414	78.4%
2008	1,181	933	79.0%
2009	1,873	984	52.5%
2010	682	1,461	214.2%
2011	861		
2011 YTD (Jun)	861	485	56.3%
2011 YE Projected	861	861	100.0%
2012	734		

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2001	932	1,125	120.7%
2002	876	18,240	2082.2%
2003	3,534	4,389	124.2%
2004	5,108	7,839	153.5%
2005	11,076	8,264	74.6%
2006	5,906	5,866	99.3%
2007	9,731	11,997	123.3%
2008	26,767	33,731	126.0%
2009	56,025	31,331	55.9%
2010	45,051	51,377	114.0%
2011	39,636		
2011 YTD (Jun)	39,636	14,640	36.9%
2011 YE Projected	39,636	39,636	100.0%
2012	41,626		

Program Ratios

Year	$/kWh Target	$/kWh Actual	$/LT kWh Target	$/LT kWh Actual	$/kW Target	$/kW Actual	Cost/ Unit
2001	$1.677	$3.053	$0.112	$0.204	$0	$0	$1,301
2002	$4.276	$0.235	$0.283	$0.016	$0	$0	$356
2003	$1.968	$1.160	$0.104	$0.061	$1,061	$728	$439
2004	$1.842	$1.019	$0.101	$0.054	$1,047	$581	$568
2005	$1.229	$1.302	$0.094	$0.081	$699	$634	$439
2006	$2.264	$1.723	$0.126	$0.134	$1,252	$1,242	$746
2007	$1.137	$1.015	$0.104	$0.090	$1,917	$2,606	$1,053
2008	$1.055	$0.621	$0.070	$0.061	$1,598	$2,215	$885
2009	$0.661	$1.229	$0.087	$0.099	$2,611	$3,140	$950
2010	$0.621	$0.756	$0.064	$0.076	$4,246	$2,658	$717
2011	$0.545		$0.057		$2,624		
2011 YTD (Jun)	$0.714	$1.201	$0.075	$0.149	$3,439	$4,502	$1,065
2011 YE Projected	$0.714	$0.714	$0.075	$0.075	$3,439	$3,439	$839
2012	$0.649		$0.055		$3,108		

Notes
1. Starting in 2007 Home Energy Solutions included HVAC program Residential Loan Program
2. Starting in 2009 Home Energy Solutions includes Residential Loan Program

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - Home Energy Solutions

Budget/FTE:

2.65 FTE for contractor relations/field support, contract administration and data/financial administration

Goal:

Program assumptions include 926 14.5 SEER and 12 EER, and higher 44 Ductless Heat pumps (replace electric resistance heat) and 2,468 comprehensive in-home services participants.,
Within the in-home services modeling assumptions included CFLs, air and duct sealing diagnostics, and DHW measures.
76% gas customers, 6% deliverable fuelsand 18% electric. Appliance incentives for refrigerators, freezers, clothes washers and dehumidifiers and insulation upgrade incentive.

Cost/kWh (Cost/Unit):

Cost rates decreased in 2012 based on focus of deeper savings per home. Cost rates will reduced as add-on measures adoption increases

Goal Setting Methodology

Goals are based on measure mix and historical measure installation quantities. Production levels based on available funds.

Metric Changes:

Increase average HES participant savings by 25% for all fuels
For 10% of HES particpants achieve 25% oveall reduction in total energy savings

YGS Standard Filing Requirement

Home Energy Solutions

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	$ 22,989	$ 47,180	$ 68,131	$ 105,027	$ 118,080	$ 281,960	$ 66,493	$ 132,987	$ 285,600	
Outside Service	$ 30,474	$ 158,176	$ 276,457	$ 90,936	$ 252,965	$ 520,960	$ 153,500	$ 351,500	$ 156,874	
Materials & Supplies	$ 424	$ -	$ 2,137	$ 651	$ 286	$ 4,800	$ -	$ -	$ 5,000	
Incentives	$ 37,466	$ 293,384	$ 438,638	$ 268,686	$ 908,398	$ 762,680	$ 553,331	$ 1,275,731	$ 1,428,366	
Marketing	$ 3,173	$ 11,560	$ 9,650	$ 49,383	$ 25,058	$ 24,000	$ 5,121	$ 10,802	$ 20,000	
Administrative Expense	$ 290	$ 101	$ 1,033	$ 1,033	$ 6,679	$ 5,600	$ 2,762	$ 5,980	$ 8,160	
Total	$ 94,816	$ 510,401	$ 796,046	$ 515,716	$ 1,311,467	$ 1,600,000	$ 781,207	$ 1,777,000	$ 1,904,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goal	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	11,295	86,333	98,698	55,728	222,581	243,065	112,858	256,716	303,115	b
Lifetime Energy Savings (ccf Reduction Goal)	213,599	1,324,880	1,770,065	1,172,933	4,768,051	4,532,590	2,107,047	4,792,869	5,488,597	c
Annual Cost Rate ($/ccf)	$ 8.39	$ 5.91	$ 8.07	$ 9.25	$ 5.89	$ 6.58	$ 6.92	$ 6.92	$ 6.28	d=a/b
Lifetime Cost Rate ($/ccf)	$ 0.44	$ 0.39	$ 0.45	$ 0.44	$ 0.28	$ 0.35	$ 0.37	$ 0.37	$ 0.35	e=a/c
Total Gas Benefit	$ 157,867	$ 970,085	$ 1,448,317	$ 1,054,775	$ 5,126,127	$ 3,890,819	$ 1,808,709	$ 4,114,245	$ 2,807,196	f
Total Gas System Benefit-Cost Ratio	$ 1.66	$ 1.90	$ 1.82	$ 2.05	$ 3.91	$ 2.43	$ 2.32	$ 2.32	$ 1.47	g=f/a
Homes Served	393	1,351	1,824	798	2,768	2,082	1,181	2,362	2,952	h
Lifetime Savings per Home (ccf)	544	981	970	1,470	1,723	2,177	1,784	2,029	1,859	i=c/h
Program Cost per Home	$ 241	$ 378	$ 436	$ 646	$ 474	$ 768	$ 661	$ 752	$ 645	k=a/h
Benefit per Home	$ 402	$ 718	$ 794	$ 1,322	$ 1,852	$ 1,869	$ 1,532	$ 1,742	$ 951	l=f/h
	$ 241.26	$ 377.79	$ 436.43	$ 646.26	$ 473.80	$ 768.49	$ 661.48		$ 645.05	

Program Costs

Year	Budget	Actual	% of Budget
2006	$ 599,097	$ 94,816	16%
2007	$ 600,000	$ 510,401	85%
2008	$ 600,000	$ 796,046	133%
2009	$ 1,000,000	$ 515,716	52%
2010	$ 1,110,652	$ 1,311,467	118%
2011 YTD (June)	$ 1,600,000	$ 781,207	49%
2011 YE projection	$ 1,600,000	$ 1,777,000	111%
2012	$ 1,904,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	1,378	393	29%
2007	1,524	988	65%
2008	1,554	1,824	117%
2009	2,554	798	31%
2010	2,799	2,768	99%
2011 YTD (June)	2,082	1,181	57%
2011 YE projection	2,082	2,362	113%
2012	2,952	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	110,445	11,295	10%
2007	65,898	57,353	87%
2008	90,954	98,698	109%
2009	176,982	55,728	31%
2010	182,022	222,581	122%
2011 YTD (June)	243,065	112,858	46%
2011 YE projection	243,065	256,716	106%
2012	303,115	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	1,988,010	213,599	11%
2007	1,551,974	902,646	58%
2008	1,524,912	1,770,065	116%
2009	3,462,230	1,172,933	34%
2010	3,776,878	4,768,051	126%
2011 YTD (June)	4,532,590	2,107,047	46%
2011 YE projection	4,532,590	4,792,869	106%
2012	5,488,597	n/a	-

CNG Standard Filing Requirement

Home Energy Solutions

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	$ 5,183	$ 44,643	$ 73,633	$ 87,082	$ 92,839	$ 255,360	$ 71,932	$ 255,360	$ 297,920	
Outside Service	$ 15,732	$ 119,469	$ 269,945	$ 108,035	$ 289,411	$ 517,855	$ 217,370	$ 517,855	$ 124,223	
Materials & Supplies	$ -	$ -	$ 268	$ 231	$ 218	$ 4,320	$ -	$ 4,320	$ 5,040	
Incentives	$ 30,156	$ 255,330	$ 443,899	$ 313,741	$ 967,045	$ 705,230	$ 855,646	$ 1,387,353	$ 1,368,054	
Marketing	$ 967	$ 7,140	$ 7,109	$ 10,307	$ 14,685	$ 10,755	$ 2,510	$ 10,755	$ 12,548	
Administrative Expense	$ -	$ 960	$ 361	$ 235	$ 3,382	$ 6,480	$ 2,250	$ 6,480	$ 7,560	
Total	$ 52,038	$ 427,542	$ 795,216	$ 519,631	$ 1,367,580	$ 1,500,000	$ 1,149,709	$ 2,182,123	$ 1,815,345	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	14163	57,353	104,456	68,203	266,670	231,251	122,717	232,914	242,255	b
Lifetime Energy Savings (ccf Reduction Goal)	213599	902,646	1,970,690	1,418,819	5,414,347	4,325,856	2,277,796	4,323,208	4,776,921	c
Annual Cost Rate ($/ccf)	$ 3.67	$ 7.45	$ 7.61	$ 7.62	$ 5.13	$ 6.49	$ 9.37	$ 9.37	$ 7.49	d=a/b
Lifetime Cost Rate ($/ccf)	$ 0.24	$ 0.47	$ 0.40	$ 0.37	$ 0.25	$ 0.35	$ 0.50	$ 0.50	$ 0.38	e=a/c
Total Gas Benefit	$ 166,163	$ 660,923	$ 1,017,119	$ 1,275,891	$ 5,820,959	$ 3,708,881	$ 1,952,925	$ 3,706,611	$ 2,429,963	f
Total Gas System Benefit-Cost Ratio	$ 3.19	$ 1.55	$ 1.28	$ 2.46	$ 4.26	$ 2.47	$ 1.70	$ 1.70	$ 1.34	g=f/a
Homes Served	366	988	1,918	1,064	3,251	1,963	1,059	2,010	2,029	h
Lifetime Savings per Home (ccf)	584	914	1,027	1,333	1,665	2,204	2,151	2,151	2,354	i=c/h
Program Cost per Home	$ 142	$ 433	$ 415	$ 488	$ 421	$ 764	$ 1,086	$ 1,086	$ 895	k=a/h
Benefit per Home	$ 454	$ 669	$ 530	$ 1,199	$ 1,791	$ 1,889	$ 1,844	$ 1,844	$ 1,198	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	$ 430,651	$ 52,038	12%
2007	$ 430,000	$ 427,542	99%
2008	$ 430,000	$ 795,216	185%
2009	$ 700,000	$ 519,631	74%
2010	$ 1,087,343	$ 1,367,580	126%
2011 YTD (June)	$ 1,500,000	$ 1,149,709	77%
2011 YE projection	$ 1,500,000	$ 2,182,123	145%
2012	$ 1,815,345	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	957	366	38%
2007	1,070	988	92%
2008	1,092	1,918	176%
2009	1,740	1,064	61%
2010	1,895	3,251	172%
2011 YTD (June)	1,963	1,059	54%
2011 YE projection	1963	2,010	102%
2012	2,029	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	76,687	14,163	18%
2007	46,279	57,353	124%
2008	59,495	104,456	176%
2009	120,531	68,203	57%
2010	123,219	266,670	216%
2011 YTD (June)	231,251	122,717	53%
2011 YE projection	231,251	232,914	101%
2012	242,255	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	1,380,365	213,599	15%
2007	1,089,915	902,646	83%
2008	1,070,910	1,970,690	184%
2009	2,357,898	1,418,819	60%
2010	2,556,743	5,414,347	212%
2011 YTD (June)	4,325,856	2,277,796	53%
2011 YE projection	4,325,856	4,323,208	100%
2012	4,776,921	n/a	-

SCG Standard Filing Requirement

Home Energy Solutions

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	$ 1,845	$ 37,628	$ 44,337	$ 62,391	$ 62,133	$ 255,360	$ 31,793	$ 255,360	$ 297,920	
Outside Service	$ 12,469	$ 18,076	$ 41,194	$ 59,660	$ 26,373	$ 514,350	$ 29,263	$ 514,350	$ 124,852	
Materials & Supplies	$ 184	$ -	$ 214	$ 218	$ 199	$ 4,350	$ -	$ 4,350	$ 5,040	
Incentives	$ 26,456	$ 133,150	$ 580,208	$ 410,760	$ 1,200,547	$ 708,950	$ 562,916	$ 894,116	$ 1,376,870	
Marketing	$ 369	$ 3,475	$ 4,195	$ 7,075	$ 3,523	$ 10,540	$ 5,464	$ 10,540	$ 12,548	
Administrative Expense	$ 184	$ 448	$ 293	$ 184	$ 3,376	$ 6,450	$ 2,250	$ 6,450	$ 7,560	
Total	$ 41,507	$ 192,777	$ 670,440	$ 540,288	$ 1,296,150	$ 1,500,000	$ 631,686	$ 1,685,166	$ 1,824,790	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	14,238	31,695	159,470	176,102	319,120	232,898	91,144	243,147	243,767	b
Lifetime Energy Savings (ccf Reduction Goal)	280,421	512,586	2,792,634	3,239,380	5,472,495	3,780,021	1,546,216	4,124,883	4,806,811	c
Annual Cost Rate ($/ccf)	$ 2.92	$ 6.08	$ 4.20	$ 3.07	$ 4.06	$ 6.44	$ 6.93	$ 6.93	$ 7.49	d=a/b
Lifetime Cost Rate ($/ccf)	$ 0.15	$ 0.38	$ 0.24	$ 0.17	$ 0.24	$ 0.40	$ 0.41	$ 0.41	$ 0.38	e=a/c
Total Gas Benefit	$ 206,809	$ 375,319	$ 1,070,385	$ 2,913,053	$ 5,883,474	$ 3,342,238	$ 1,367,141	$ 3,647,160	$ 2,445,147	f
Total Gas System Benefit-Cost Ratio	$ 4.98	$ 1.95	$ 1.60	$ 5.39	$ 4.54	$ 2.23	$ 2.16	$ 2.16	$ 1.34	g=f/a
Homes Served	88	430	1,149	1,421	2,538	2,006	922	2,460	2,042	h
Lifetime Savings per Home (ccf)	3,187	1,192	2,430	2,280	2,156	1,884	1,677	1,677	2,354	i=c/h
Program Cost per Home	$ 472	$ 448	$ 583	$ 380	$ 511	$ 748	$ 685	$ 685	$ 894	k=a/h
Benefit per Home	$ 2,350	$ 873	$ 932	$ 2,050	$ 2,318	$ 1,666	$ 1,483	$ 1,483	$ 1,197	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	$ 449,651	$ 41,507	9%
2007	$ 450,000	$ 192,777	43%
2008	$ 450,000	$ 670,440	149%
2009	$ 700,000	$ 540,288	77%
2010	$ 700,000	$ 1,296,150	185%
2011 YTD (June)	$1,500,000	$ 631,686	42%
2011 YE projection	$1,500,000	$ 1,685,166	112%
2012	$1,824,790	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	1,004	88	9%
2007	1,127	430	38%
2008	1,149	1,870	163%
2009	1,740	1,421	82%
2010	1,895	2,538	134%
2011 YTD (June)	2,006	922	46%
2011 YE projection	2,006	2,460	123%
2012	2,042	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	80,495	14,238	18%
2007	48,702	31,695	65%
2008	62,611	159,470	255%
2009	120,531	176,102	146%
2010	123,219	319,120	259%
2011 YTD (June)	232,898	91,144	39%
2011 YE projection	232,898	243,147	104%
2012	243,767	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	1,448,905	280,421	19%
2007	1,146,993	512,586	45%
2008	1,126,993	2,792,634	248%
2009	2,357,898	3,239,380	137%
2010	2,556,743	5,472,495	214%
2011 YTD (June)	3,780,021	1,546,216	41%
2011 YE projection	3,780,021	4,124,883	109%
2012	4,806,811	n/a	-

HES Income Eligible

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 420	$ 529	$ 911	$ 328	$ 886	$ 662		$ 662
Contractor Staff	$ 40	$ 61	$ -	$ 93	$ 200	$ 442		$ 442
Total Labor	$ 459	$ 590	$ 911	$ 422	$ 1,086	$ 1,103		$ 1,103
Material & Supply	$ 5	$ 4	$ 30	$ 1	$ 30	$ 30	a)	$ 30
Outside Service	$ 424	$ 420	$ 1,204	$ 254	$ 1,146	$ 107		$ 106
Incentives	$ 6,827	$ 8,245	$ 8,472	$ 3,616	$ 8,062	$ 7,767		$ 7,716
Marketing	$ 20	$ 81	$ 288	$ 44	$ 280	$ 275		$ 273
Administrative Expense	$ 12	$ 13	$ 70	$ 5	$ 68	$ 68	b)	$ 68
Other	$ 11	$ 9	$ 52	$ 3	$ 51	$ 50		$ 50
Total	$ 7,758	$ 9,362	$ 11,027	$ 4,345	$ 10,722	$ 9,400		$ 9,346

a) Actual materials and labor done by Community Action Agencies and/or vendor.

b) Employee expenses including mileage, training, conference attendance and misc.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	928.7
Annual Energy Savings (KWh Reduction Goal)	13,728,204
Lifetime Energy Savings (kWh Reduction Goal)	116,400,232
Annual Cost Rate ($/kWh)	$ 0.685
Lifetime Cost Rate ($/kWh)	$ 0.081
Electric b/c Ratio	0.93
Total Resource b/c Ratio	2.17

CL&P Standard Filing Requirement

HES Income Eligible

Program Costs

Year	Budget	Actual	% of Budget	Cost/participant	$/LT-kWh
2000	$ 5,000,000	$ 4,406,000	88%	$653	0.042
2001	$ 5,000,000	$ 5,036,000	101%	$754	0.040
2002	$ 4,420,000	$ 4,716,000	107%	$783	0.033
2003	$ 4,024,000	$ 3,181,815	79%	$864	0.038
2004	$ 4,250,000	$ 4,590,734	108%	$524	0.034
2005 Revised	$ 5,891,143	$ 4,682,547	79%	$477	0.044
2006 Revised	$ 5,850,000	$ 5,298,638	91%	$506	0.050
2007 Revised	$ 6,000,000	$ 7,112,363	117%	$626	0.064
2008 Revised	$ 7,575,094	$ 7,035,693	93%	$828	0.061
2009 Revised	$ 9,005,048	$ 7,758,362	86%	$755	0.069
2010 Revised	$ 11,399,500	$ 9,361,764	82%	$1,000	0.090
2011 Revised	$ 11,027,050	n/a	n/a	n/a	-
2011 YTD (Jun)	n/a	$ 4,344,644	38%	$984	0.098
2011 Y/E Projected	$ 11,027,050	$ 10,722,061	94%	$1,214	0.093
2012	$ 9,400,400	n/a	n/a	n/a	n/a

Goal - Participation

Year	Goal	Actual	% of Goal
2000	6,000	6,749	112%
2001	5,866	6,675	114%
2002	4,900	6,022	123%
2003	6,094	3,683	60%
2004	6,694	8,765	131%
2005 Revised	7,517	9,818	131%
2006 Revised	10,192	10,481	103%
2007 Revised	10,636	11,244	106%
2008 Revised	14,509	8,501	59%
2009 Revised	14,038	10,282	73%
2010 Revised	16,566	9,362	57%
2011 Revised	15,243	n/a	n/a
2011 YTD (Jun)	n/a	4,415	27%
2011 Y/E Projected	n/a	8,830	53%
2012	14,445	n/a	n/a

Goal - Lifetime MWh savings

Year	Budget	Actual	% of Budget
2000	160,261	104,812	65%
2001	107,844	125,527	116%
2002	86,326	144,198	167%
2003	101,614	84,526	83%
2004	115,905	135,997	117%
2005 Revised	113,022	107,224	95%
2006 Revised	88,603	105,089	119%
2007 Revised	94,961	109,864	116%
2008 Revised	149,518	115,014	77%
2009 Revised	147,661	111,730	76%
2010 Revised	128,657	104,256	81%
2011 Revised	137,298	n/a	n/a
2011 YTD (Jun)	n/a	44,274	34%
2011 Y/E Projected	137,298	115,363	90%
2012	116,400	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	531	427	80.4%
2004	626	652	104.2%
2005 Revised	828	806	97.3%
2006 Budget	1,299	1,110	85.4%
2007 Revised	1,442	1,067	74.0%
2008 Revised	1,521	1,271	83.6%
2009 Revised	1,455	1,172	80.6%
2010 Revised	1,832	1,146	62.6%
2011 Revised	1,767	n/a	n/a
2011 YTD (Jun)	n/a	453	24.8%
1 Y/E Projected	1,767	1,368	74.7%
2012	1,677	n/a	n/a

Program Ratios

Year	$/Lifetime kWh Plan	$/Lifetime kWh Actual	$/Annualized kW Plan	$/Annualized kW Actual
2000	0.031	0.042	n/a	8407
2001	0.046	0.040	n/a	6375
2002	0.051	0.033	n/a	7,452
2003	0.039	0.038	8,176	7,452
2004	0.037 [1]	0.034	6,790	7,041
2005 Revised	0.052	0.044	7,115	5,811
2006 Revised	0.066	0.050	4,503	4,774
2007 Revised	0.063	0.065	4,161	6,664
2008 Revised	0.051	0.061	4,980	5,536
2009 Revised	0.061	0.069	6,790	6,618
2010 Revised	0.089	0.090	6,224	8,171
2011 Revised	0.080	n/a	6,241	n/a
2011 YTD (Jun)	n/a	0.098	n/a	9,581
2011 Y/E Projected	n/a	0.093	n/a	7,836
2012	0.081	n/a	5,605	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - HES Income Eligible

Budget/FTE

4.9 FTE for program administration, vendor interaction, sales and field support.

Goal

14,445 Customers Served

Cost/Unit

$651 Average cost per customer.

Goal Setting Methodology

Goal was based on available dollars and average cost per customer.

Metric Changes

None

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

HES Income Eligible

Baseline Assumptions:

Market: Residential customers on limited and fixed income < 60% State Median Income

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 171,145	$ 185,551	$ 89,279	$ 185,551	$ 189,057	a)	$ 198,510
Contractor Staff	$ -	$ -	$ -	$ -	$ -	b)	$ -
Total Labor	$ 171,145	$ 185,551	$ 89,279	$ 185,551	$ 189,057		$ 198,510
Materials & Supplies	$ 14,460	$ 15,691	$ 4,023	$ 15,691	$ 5,000	c)	$ 5,000
Outside Services	$ 45,882	$ 119,353	$ 21,566	$ 119,353	$ 31,000	d)	$ 31,000
Incentives	$ 2,728,560	$ 2,135,845	$ 748,604	$ 2,135,845	$ 1,851,536	e)	$ 1,828,884
Marketing	$ 12,709	$ 35,000	$ 22,471	$ 35,000	$ 35,000	f)	$ 35,000
Other	$ -	$ -	$ -	$ -	$ -	g)	$ -
Administrative Expenses	$ 3,402	$ 7,556	$ 2,385	$ 7,556	$ 6,500	h)	$ 6,500
Total	$ 2,976,157	$ 2,498,996	$ 888,328	$ 2,498,996	$ 2,118,093		$ 2,104,894

a) 1.93 FTEs
b) No comment
c) Printing of Program forms and educational materials
d) Services for 3,121 in-home services
e) Incentives for 3,121 in-home services
incl. appliance replacements refrigerators, ductless heatpumps, and dehumidifiers replacements
f) Brochure revision, select advertising, public relations, etc.
g) No comment
h) Meals, miles, travel and training

Goals and Metrics Information:

Savings	2012
Demand Savings (kW)	210
Annual Energy Savings (kWh)	3,070,255
Lifetime Energy Savings (kWh)	40,277,158
Annual Cost Rate ($/kWh)	$ 0.690
Lifetime Cost Rate ($/kWh)	$ 0.053
Cost per kW	$ 10,100
Electric System B/C Ratio	1.26
Total Resource B/C Ratio	2.20

The United Illuminating Company
LF-26 Standard Filing Requirement

HES Income Eligible

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$1,542	$1,795	116.4%
2001	$1,519	$1,500	98.7%
2002	$1,235	$1,168	94.6%
2003	$1,117	$799	71.5%
2004	$773	$803	103.9%
2005	$1,473	$1,086	73.7%
2006	$1,328	$1,250	94.1%
2007	$1,224	$1,107	90.4%
2008	$1,558	$939	60.3%
2009	$3,125	$3,448	110.3%
2010	$3,444	$2,976	86.4%
2011	$2,498		
2011 YTD (Jun)	$2,498	$888	35.6%
2011 YE Projected	$2,498	$2,499	100.0%
2012	$2,118		

Goal - Number of Customers Served

Year	Goal	Actual	% of Goal Achieved
2000	4,859	6,452	132.8%
2001	6,500	7,720	118.8%
2002	5,000	7,078	141.6%
2003	7,204	5,377	74.6%
2004	4,300	4,722	109.8%
2005	6,500	8,603	132.4%
2006	6,500	6,116	94.1%
2007	5,200	3,660	70.4%
2008	4,200	2,692	64.1%
2009	7,924	4,850	61.2%
2010	4,400	4,550	103.4%
2011	3,106		
2011 YTD (Jun)	3,106	2,041	65.7%
2011 YE Projected	3,106	3,106	100.0%
2012	3,121		

Goal - Installed kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	4,000	5,097	127.4%
2001	5,135	6,086	118.5%
2002	3,877	5,550	143.2%
2003	3,601	2,779	77.2%
2004	2,954	4,053	137.2%
2005	4,327	5,130	118.6%
2006	4,248	4,785	112.6%
2007	3,822	3,498	91.5%
2008	3,822	2,511	65.7%
2009	7,675	3,122	40.7%
2010	6,906	4,204	60.9%
2011	3,577		
2011 YTD (Jun)	3,577	1,452	40.6%
2011 YE Projected	3,577	3,577	100.0%
2012	3,070		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	292	283	96.9%
2004	253	294	116.2%
2005	444	416	93.7%
2006	458	474	103.5%
2007	360	338	93.9%
2008	409	229	56.0%
2009	715	277	38.7%
2010	353	324	91.8%
2011	252		
2011 YTD (Jun)	252	139	55.2%
2011 YE Projected	252	252	100.0%
2012	210		

Goal - Lifetime kWh Savings (000's kWh)

Year	Goal	Actual	% of Goal Achieved
2000	40,027	50,971	127.3%
2001	51,350	60,860	118.5%
2002	38,773	55,500	143.1%
2003	31,597	24,412	77.3%
2004	14,700	17,352	118.0%
2005	15,631	36,581	234.0%
2006	31,969	36,749	115.0%
2007	28,126	32,294	114.8%
2008	29,528	20,676	70.0%
2009	56,704	24,879	43.9%
2010	81,275	40,905	50.3%
2011	42,455		
2011 YTD (Jun)	42,455	12,139	28.6%
2011 YE Projected	42,455	42,455	100.0%
2012	40,277		

Program Ratios

Year	$/kWh Target	$/kWh Actual	$/LT kWh Target	$/LT kWh Actual	$/kW Target	$/kW Actual	Cost/ Customer
2000	$0.386	$0.352	$0.039	$0.035	$0	$0	$278
2001	$0.296	$0.246	$0.030	$0.025	$0	$0	$194
2002	$0.319	$0.210	$0.032	$0.021	$0	$0	$165
2003	$0.310	$0.288	$0.035	$0.033	$3,825	$2,823	$155
2004	$0.262	$0.198	$0.053	$0.046	$3,055	$2,731	$170
2005	$0.340	$0.212	$0.094	$0.030	$3,318	$2,611	$126
2006	$0.313	$0.261	$0.042	$0.034	$2,900	$2,638	$204
2007	$0.320	$0.316	$0.044	$0.034	$3,400	$3,275	$302
2008	$0.408	$0.374	$0.053	$0.045	$3,809	$4,100	$349
2009	$0.407	$1.104	$0.055	$0.139	$4,371	$12,448	$711
2010	$0.499	$0.708	$0.042	$0.073	$9,756	$9,185	$654
2011	$0.698		$0.059		$9,913		
2011 YTD (Jun)	$0.698	$0.612	$0.059	$0.073	$9,913	$6,391	$435
2011 YE Projected	$0.698	$0.699	$0.059	$0.059	$9,913	$9,917	$805
2012	$0.690		$0.053		$10,100		

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - HES Income Eligible

Budget/FTE:

1.93 FTE to provide direct contact with community outreach, contract administration/vendor oversight, and financial/data administration

Goal:

Program is designed around 3,121 existing homes
plus appliance replacement refrigerators, dehumidifiers and ductless heatpumps

Cost/kWh (Unit/Cost):

Cost rates increased per customer increase of oil home participation
and focus on comprehensive piggy back services with Gas Co.
Funding of non-electric measures in oil heated homes up to 25% of total budget for such measures

Goal Setting Methodology

Goal is driven program history, measure mix and historical installation quantities
Production levels based on available funds.

YGS Standard Filing Requirement

HES Income Eligible Weatherization

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	$ 39,223	$ 70,812	$ 74,616	$ 85,041	$ 107,390	$ 168,910	$ 86,372	$ 172,745	$ 175,500	
Outside Services	$ 28,379	$ 32,610	$ 72,802	$ 36,830	$ 45,922	$ 93,120	$ 185,953	$ 324,295	$ 120,000	
Materials & Supplies	$ 261	$ -	$ 331	$ 607	$ 678	$ 2,340	$ -	$ 1,170	$ 2,500	
Incentives	$ 334,759	$ 343,427	$ 560,711	$ 818,189	$ 887,830	$ 660,950	$ 386,939	$ 1,290,988	$ 892,000	
Marketing	$ 1,284	$ 26,453	$ 2,944	$ 7,403	$ 8,985	$ 2,925	$ 4,243	$ 5,064	$ 7,500	
Administrative Expense	$ 543	$ 196	$ 1,398	$ 3,672	$ 4,147	$ 1,755	$ 552	$ 822	$ 2,500	
Total	$ 404,449	$ 473,498	$ 712,802	$ 951,742	$ 1,054,952	$ 930,000	$ 664,059	$ 1,795,084	$ 1,200,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goal	2011 YTD (June)	2011 YE Projection	2012 Goal	
Annual Energy Savings (ccf Reduction Goal)	45,734	101,407	94,054	195,280	194,946	156,774	131,516	355,514	156,228	b
Lifetime Energy Savings (ccf Reduction Goal)	941,555	1,396,219	1,617,301	3,534,308	2,616,614	2,394,163	2,228,668	6,024,534	2,927,549	c
Annual Cost Rate ($/ccf)	$ 8.84	$ 4.67	$ 7.58	$ 4.87	$ 5.41	$ 5.93	$ 5.05	$ 5.05	$ 7.68	d=a/b
Lifetime Cost Rate ($/ccf)	$ 0.43	$ 0.34	$ 0.44	$ 0.27	$ 0.40	$ 0.39	$ 0.30	$ 0.30	$ 0.41	e=a/c
Total Gas Benefit	$ 664,294	$ 835,829	$ 987,487	$ 3,423,553	$ 2,924,501	$ 2,169,027	$ 2,019,094	$ 5,863,312	$ 1,481,815	f
Total Gas System Benefit-Cost Ratio	$ 1.64	$ 1.77	$ 1.39	$ 3.60	$ 2.77	$ 2.33	$ 3.04	$ 3.27	$ 1.23	g=f/a
Homes Served	574	1,238	1,350	1,932	2,497	1,779	765	2,068	1,617	h
Lifetime Savings per Home (ccf)	1,640	1,128	1,198	1,829	1,048	1,346	2,913	2,913	1,811	i=c/h
Program Cost per Home	$ 705	$ 382	$ 528	$ 493	$ 422	$ 523	$ 868	$ 868	$ 742	k=a/h
Benefit per Home	$ 1,157	$ 675	$ 731	$ 1,772	$ 1,171	$ 1,219	$ 2,639	$ 2,835	$ 917	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	$ 243,933	$ 404,449	166%
2007	$ 400,000	$ 473,498	118%
2008	$ 400,000	$ 712,802	178%
2009	$ 925,000	$ 951,742	103%
2010	$ 925,000	$ 1,054,952	114%
2011 YTD (June)	$ 930,000	$ 664,059	71%
2011 YE projection	$ 930,000	$ 1,795,084	193%
2012	$ 1,200,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	301	574	191%
2007	660	1,238	188%
2008	1,225	1,350	110%
2009	1,659	1,932	116%
2010	1,147	2,497	218%
2011 YTD (June)	1,779	765	43%
2011 YE projection	1,779	2,068	116%
2012	1,617	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	35,150	45,734	130%
2007	56,432	101,407	180%
2008	74,675	94,054	126%
2009	104,320	195,280	187%
2010	142,173	194,946	137%
2011 YTD (June)	156,774	131,516	84%
2011 YE projection	156,774	355,514	227%
2012	156,228	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	572,388	941,555	164%
2007	1,172,876	1,396,219	119%
2008	970,771	1,617,301	167%
2009	1,599,520	3,534,308	221%
2010	2,536,750	2,616,614	103%
2011 YTD (June)	2,394,163	2,228,668	93%
2011 YE projection	2,394,163	6,024,534	252%
2012	2,927,549	n/a	-

CNG Standard Filing Requirement

HES Income Eligible Weatherization and Heating Systems

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	$ 33,320	$ 23,186	$ 61,239	$ 93,036	$ 74,831	$ 134,995	$ 34,651	$ 134,995	$ 168,744	
Outside Service	$ 151,163	$ 26,824	$ 26,903	$ 30,860	$ 46,419	$ 79,332	$ 24,693	$ 79,332	$ 62,722	
Materials & Supplies	$ 2,397	$ -	$ 24	$ -	$ 450	$ 2,800	$ -	$ 2,800	$ 3,500	
Incentives	$ 251,308	$ 332,058	$ 340,635	$ 540,010	$ 676,914	$ 604,485	$ 258,459	$ 955,959	$ 785,606	
Marketing	$ 3,596	$ 19,105	$ 1,751	$ 1,738	$ 6,660	$ 2,080	$ 1,588	$ 2,080	$ 2,600	
Administrative Expense	$ 1,678	$ 14	$ 307	$ 2	$ 25	$ 2,080	$ -	$ 2,080	$ 2,600	
Total	$ 443,462	$ 401,187	$ 430,859	$ 665,645	$ 805,299	$ 825,772	$ 319,391	$ 1,177,246	$ 1,025,772	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goal	2011 YTD (June)	2011 YE Projection	2012 Goal	
Annual Energy Savings (ccf Reduction Goal)	43,949	62,141	66,843	135,579	149,137	134,146	142,761	526,204	113,054	b
Lifetime Energy Savings (ccf Reduction Goal)	904,811	961,680	889,992	2,160,620	2,062,386	2,180,736	1,903,648	7,016,672	2,025,706	c
Annual Cost Rate ($/ccf)	$ 10.09	$ 6.46	$ 6.45	$ 4.91	$ 5.40	$ 6.16	$ 2.24	$ 2.24	$ 9.07	d=a/b
Lifetime Cost Rate ($/ccf)	$ 0.49	$ 0.42	$ 0.48	$ 0.31	$ 0.39	$ 0.38	$ 0.17	$ 0.17	$ 0.51	e=a/c
Total Gas Benefit	$ 638,367	$ 712,183	912,488	$2,092,912	$2,305,058	$ 1,993,137	$ 1,739,886	$ 6,413,061	$ 1,050,153	f
Total Gas System Benefit-Cost Ratio	$ 1.44	$ 1.78	$ 2.12	$ 3.14	$ 2.86	$ 2.41	$ 5.45	$ 5.45	$ 1.02	g=f/a
Homes Served	582	531	963	1,492	1,428	1,235	909	1,818	1,661	h
Lifetime Savings per Home (ccf)	1,555	1,811	924	1,448	1,444	1,765	2,094	3,860	1,220	i=c/h
Program Cost per Home	$ 762	$ 756	$ 447	$ 446	$ 564	$ 668	$ 351	$ 648	$ 618	k=a/h
Benefit per Home	$ 1,097	$ 1,341	$ 948	$ 1,403	$ 1,614	$ 1,613	$ 1,914	$ 3,528	$ 632	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	$ 265,000	$ 443,462	167%
2007	$ 370,000	$ 401,187	108%
2008	$ 385,000	$ 430,859	112%
2009	$ 570,000	$ 665,645	117%
2010	$ 699,867	$ 805,299	115%
2011 YTD (June)	$ 825,772	$ 319,391	39%
2011 YE projection	$ 825,772	$ 1,177,246	143%
2012	$ 1,025,772	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	333	582	175%
2007	610	531	87%
2008	1,132	963	85%
2009	1,185	1,492	126%
2010	852	1,428	168%
2011 YTD (June)	1,235	909	74%
2011 YE projection	1,235	1,818	147%
2012	1,661	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	38,869	43,949	113%
2007	52,146	62,141	119%
2008	69,003	66,843	97%
2009	74,514	135,579	182%
2010	105,666	149,137	141%
2011 YTD (June)	134,146	142,761	106%
2011 YE projection	134,146	526,204	392%
2012	113,054	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	632,949	904,811	143%
2007	1,042,922	961,680	92%
2008	897,042	889,992	99%
2009	1,142,515	2,160,620	189%
2010	1,885,367	2,062,386	109%
2011 YTD (June)	2,180,736	1,903,648	87%
2011 YE projection	2,180,736	7,016,672	322%
2012	2,025,706	n/a	-

SCG Standard Filing Requirement

HES Income Eligible Weatherization and Heating Systems

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	$ 19,494	$ 27,200	$ 12,629	$ 11,950	$ 8,956	$ 134,995	$ 5,978	$ 134,995	$ 164,994	
Outside Service	$ 85,169	$ 118,376	$ -	$ 308	$ 939	$ 87,903	$ 914	$ 87,903	$ 63,753	
Materials & Supplies	$ 1,433	$ -	$ 24	$ -	$ 147	$ 3,240	$ -	$ 3,240	$ 3,960	
Incentives	$ 141,593	$ 197,564	$ 478,618	$ 1,335,251	$ 936,647	$ 694,805	$ 925,619	$ 1,592,018	$ 887,156	
Marketing	$ 2,150	$ 796	$ 674	$ 2,366	$ 834	$ 2,430	$ 1,985	$ 2,430	$ 2,970	
Administrative Expense	$ 1,003	$ 7	$ 107	$ -	$ 11	$ 2,430	$ -	$ 2,430	$ 2,970	
Total	$ 250,842	$ 343,943	$ 492,052	$ 1,349,874	$ 947,533	$ 925,803	$ 934,496	$ 1,823,016	$ 1,125,803	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2011 Goals	
Annual Energy Savings (ccf Reduction Goal)	34,052	71,551	87,541	462,617	214,440	168,213	101,458	197,924	127,667	b
Lifetime Energy Savings (ccf Reduction Goal)	579,135	975,607	956,898	7,964,615	3,551,448	2,765,352	1,502,108	2,930,314	2,287,555	c
Annual Cost Rate ($/ccf)	$ 7.37	$ 4.81	$ 5.62	$ 0.17	$ 0.27	$ 5.50	$ 9.21	$ 9.21	$ 8.82	d=a/b
Lifetime Cost Rate ($/ccf)	$ 0.43	$ 0.35	$ 0.51	$ 2.92	$ 4.42	$ 0.33	$ 0.62	$ 0.62	$ 0.49	e=a/c
Total Gas Benefit	$ 438,322	$ 722,497	$ 727,728	$ 7,715,026	$ 3,969,334	$ 2,411,905	$ 1,310,120	$ 2,555,783	$ 1,185,899	f
Total Gas System Benefit-Cost Ratio	$ 1.75	$ 2.10	$ 1.48	$ 5.72	$ 4.19	$ 2.61	$ 1.40	$ 1.40	$ 1.05	g=f/a
Homes Served	253	545	1,910	3,511	2,034	1,483	1,028	2,005	1,875	h
Lifetime Savings per Home (ccf)	2,289	1,790	501	132	105	1,865	1,461	1,461	1,220	i=c/h
Program Cost per Home	$ 991	$ 631	$ 258	$ 384	$ 466	$ 624	$ 909	$ 909	$ 600	k=a/h
Benefit per Home	$ 1,732	$ 1,326	$ 381	$ 2,197	$ 1,951	$ 1,627	$ 1,274	$ 1,274	$ 632	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	$ 251,934	$ 250,843	100%
2007	$ 350,000	$ 343,943	98%
2008	$ 365,000	$ 492,052	135%
2009	$ 570,000	$ 1,349,874	237%
2010	$ 700,569	$ 947,533	135%
2011 YTD (June)	$ 925,803	$ 934,496	101%
2011 YE projection	$ 925,803	$ 1,823,016	197%
2012	$1,125,803	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	313	253	81%
2007	574	545	95%
2008	1,067	1,910	179%
2009	1,185	3,511	296%
2010	852	2,034	239%
2011 YTD (June)	1,483	1,028	69%
2011 YE projection	1,483	2,005	135%
2012	1,875	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	36,503	34,052	93%
2007	49,134	71,551	146%
2008	65,017	87,541	135%
2009	74,514	462,617	621%
2010	105,631	214,440	203%
2011 YTD (June)	168,213	101,458	60%
2011 YE projection	168,213	197,924	118%
2012	127,667	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	594,411	579,135	97%
2007	982,670	975,607	99%
2008	845,218	956,898	113%
2009	1,142,515	7,964,615	697%
2010	1,884,754	3,551,448	188%
2011 YTD (June)	2,765,352	1,502,108	54%
2011 YE projection	2,765,352	2,930,314	106%
2012	2,287,555	n/a	-

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Residential Water Heating Program (Electric and Natural Gas)

Objective:

The objective of the Companies' Residential Water Heating Program is to encourage customers to purchase and install high-efficiency natural gas water heaters including indirect water heaters, on-demand tankless water heaters, combined boiler and on-demand water heating units. For electric water heating, this program promotes the purchase and installation of electric heat pump water heaters as a high efficiency option.

Target Market:

All residential customers in the Companies' service territories.

Program Description:

Qualified residential customers will receive a $100 rebate for installing a natural gas ENERGY STAR -qualified indirect, on-demand tankless or combined boiler and water heater unit. Also, qualified electric residential customers will receive a $400 rebate for installing an ENERGY STAR -qualified electric heat pump water heater. For customers to qualify for a gas rebate, they must submit (along with the completed rebate application) an inspection report signed by the local building inspector indicating that the installation of the gas hot water heater has passed inspection and complies with all building codes and relevant safety regulations. The rebate form must be filled out completely, signed and accompanied by dated sales receipts or invoice.

The following types of technologies qualify:

- Indirect water heating systems that are connected to ENERGY STAR -rated boilers (90 percent AFUE or greater).
- ENERGY STAR -qualified on-demand tankless water heater with an electronic ignition (82 percent Energy Factor or greater).
- Combined High-Efficiency ENERGY STAR -rated boiler and combined heating water units (90 percent AFUE or greater).
- ENERGY STAR -qualified heat pump water heaters with a minimum coefficient of performance (COP) of 2.0.

Marketing Strategy:

The program will be marketed through contractor networks, distributors, home improvement retailers, Companies' websites and call centers, and through the Home Energy Solutions and Residential New Construction programs. The Companies will continue to seek out special retail placement opportunities including point of purchase materials to highlight the benefits of high efficiency products. Cooperative opportunities will be leveraged to create general awareness of the ENERGY STAR brand, generate sales and extend the message to customers. In addition, targeted, direct marketing campaigns (including past and present HES participants who heat with electric hot water) may be used.

Incentives:

A $300 rebate will be offered to the residential customers who purchase and install either high efficiency indirect water heaters attached to their natural gas ENERGY STAR -rated boiler, or a combined high efficiency ENERGY STAR -qualified boilers and water heating units. A $100 incentive will be offered for an ENERGY STAR tankless water heater. Also, a $400 rebate will be offered to residential electric customers who purchase and install ENERGY STAR-qualified heat pump water heaters. The heat pump water heater incentive is only available for customers that have electric hot water heaters, including first generation heat pump water heaters, or for customers that are building all-electric new homes.

Goals:

The budget, savings and benefits of the Companies' Residential Water Heating program are presented in the standard filing requirements. For budget and reporting purposes, electric heat pump water heaters are included in Home Energy Solutions.

New Program Issues:

In 2012, avoided costs for natural gas have dropped by approximately forty percent (See Chapter 6, Cost Benefit Analysis). In addition, savings assumptions for natural gas water heaters decreased in 2012 as a result of updated algorithms used in the Program Savings Documentation ("PSD"). As a result, it was necessary to decrease the incentive for tankless gas water heating equipment in order for the program to remain cost effective. Therefore, the $300 incentive offered in 2011 for tankless water heaters has been decreased to $100, and the budget for program has been lowered to reflect lower per unit incentive amounts.

Commercially manufactured heat pump water heaters have recently become available to the general public. This technology gives homeowners with electric water heat an option to greatly improve their water heating efficiency. The Companies are mindful that heat pump water heaters may not always be a suitable replacement for electric resistance water heaters. Heat pump water heaters need to be located in an area which provides sufficient volume so they can "breath". A below-grade unconditioned

basement is the ideal environment for a heat pump water heater. Anecdotally, many electric water heaters are located in closets and/or within conditioned space. In these situations, a heat pump water heater may not operate efficiently and/or it could cause discomfort issues such as “cold feet” or noise.

In April 2008, ENERGY STAR released its first ever specification for residential heat pump water heaters. While these requirements are important, they did not address some of the key consumer or application issues identified through utility program experience in northern climates. The Companies have been active in a national effort to develop standards that are more applicable to northern tier states. The purpose of the northern tier standards would be to ensure consumer satisfaction and high energy performance in cooler climates. The northern tier standards will attempt to address issues including cold air exhaust, condensate management, cold weather efficiency, freeze protection, and reliability.

Current manufacturer training of heat pump water heater installers focuses primarily on marketing and insufficiently addresses some of the important aforementioned issues. To address this concern, the companies plan to work with manufacturers, contractors and building officials on consumer education and to promote and enforce the proper application and installation of heat pump water heaters. As a follow-up, the Companies will solicit feedback from customers who have installed a heat pump water heater to gauge their satisfaction and to ensure that manufacturer guidelines are being followed.

YGS Standard Filing Requirement

Water Heating

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 3,346	$ 4,059	$ 2,972	$ 26,600	$ 1,645	$ 3,291	$ 3,500	
Outside Service	n/a	n/a	$ 8,322	$ 6,568	$ 2,844	$ 8,000	$ 3,197	$ 5,470	$ 4,100	
Materials & Supplies	n/a	n/a	$ -	$ -	$ -	$ 500	$ -	$ -	$ 256	
Incentives	n/a	n/a	$ 49,728	$ 92,196	$ 50,786	$ 91,300	$ 22,519	$ 108,792	$ 56,917	
Marketing	n/a	n/a	$ 1,349	$ 912	$ 2,967	$ 8,210	$ 1,934	$ 4,138	$ 4,207	
Administrative Expense	n/a	n/a	$ 114	$ 355	$ 1,277	$ 1,990	$ -	$ -	$ 1,020	
Total			$ 62,859	$ 104,090	$ 60,847	$ 136,600	$ 29,295	$ 121,690	$ 70,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goal	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	9,728	18,422	10,883	17,043	2,856	11,864	24,361	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	194,560	368,448	217,664	340,855	57,120	237,274	292,328	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 0.32	$ 5.65	$ 5.59	$ 8.02	$ 10.26	$ 10.26	2.87	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.32	$ 0.28	$ 0.28	$ 0.40	$ 0.51	$ 0.51	0.24	e=a/c
Total Gas Benefit	n/a	n/a	$ 326,881	$ 308,242	$ 197,047	$ 236,740	$ 39,673	$ 164,798	$ 152,765	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 5.20	$ 2.96	$ 3.24	$ 1.73	$ 1.35	1.35	2.18	g=f/a
Homes Served	n/a	n/a	160	303	179	304	51	212	569	h
Lifetime Savings per Home (ccf)	n/a	n/a	1,216	1,216	1,216	1,120	1,120	1,120	514	i=c/h
Program Cost per Home	n/a	n/a	$ 393	$ 344	$ 340	$ 449	$ 574	$ 574	$ 123	k=a/h
Benefit per Home	n/a	n/a	$ 2,043	$ 1,017	$ 1,101	$ 778	$ 778	$ 778	$ 268	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 136,600	$ 62,859	46%
2009	$ 136,600	$ 104,090	76%
2010	$ 136,600	$ 60,847	45%
2011 YTD (June)	$ 136,600	$ 29,295	21%
2011 YE projection	$ 136,600	$ 121,690	89%
2012	$ 70,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	290	160	55%
2009	359	303	84%
2010	342	179	52%
2011 YTD (June)	304	51	17%
2011 YE projection	304	212	70%
2012	569	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	17,630	9,728	55%
2009	21,807	18,422	84%
2010	20,791	10,883	52%
2011 YTD (June)	17,043	2,856	17%
2011 YE projection	17,043	11,864	70%
2012	24,361	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	352,592	194,560	55%
2009	436,139	368,448	84%
2010	415,811	217,664	52%
2011 YTD (June)	340,855	57,120	17%
2011 YE projection	340,855	237,274	70%
2012	292,328	n/a	-

CNG Standard Filing Requirement

Water Heating

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 5,385	$ 3,750	$ 2,338	$ 22,610	$ 858	$ 22,610	$ 5,000	
Outside Service	n/a	n/a	$ 5,552	$ 5,297	$ 2,626	$ 2,305	$ 1,767	$ 2,305	$ 2,305	
Materials & Supplies	n/a	n/a	$ -	$ -	$ -	$ 500	$ -	$ 500	$ 500	
Incentives	n/a	n/a	$ 26,107	$ 82,462	$ 54,072	$ 71,535	$ 37,030	$ 68,230	$ 23,800	
Marketing	n/a	n/a	$ 794	$ 253	$ 426	$ 6,450	$ 1,392	$ 6,450	$ 6,450	
Administrative Expense	n/a	n/a	$ 242	$ 355	$ -	$ 2,000	$ -	$ 2,000	$ 2,000	
Total			$ 38,080	$ 92,116	$ 59,462	$ 105,400	$ 41,047	$ 102,095	$ 40,055	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	5,107	16,355	11,734	13,353	4,368	10,864	10,186	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	102,144	327,104	234,688	267,064	87,360	217,288	122,237	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 7.46	$ 5.63	$ 5.07	$ 7.89	$ 9.40	$ 9.40	$ 3.93	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.37	$ 0.28	$ 0.25	$ 0.39	$ 0.47	$ 0.47	$ 0.33	e=a/c
Total Gas Benefit	n/a	n/a	$ 236,707	$ 273,653	$ 212,458	$ 185,488	$ 60,675	$ 150,916	$ 65,790	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 6.22	$ 2.97	$ 3.57	$ 1.76	$ 1.48	$ 1.48	$ 1.64	g=f/a
Homes Served	n/a	n/a	84	269	193	238	78	194	238	h
Lifetime Savings per Home (ccf)	n/a	n/a	1,216	1,216	1,216	1,122	1,120	1,120	514	i=c/h
Program Cost per Home	n/a	n/a	$ 453	$ 342	$ 308	$ 443	$ 526	$ 526	$ 168	k=a/h
Benefit per Home	n/a	n/a	$ 2,818	$ 1,017	$ 1,101	$ 779	$ 778	$ 778	$ 276	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 105,400	$ 38,080	36%
2009	$ 105,400	$ 92,116	87%
2010	$ 105,400	$ 59,462	56%
2011 YTD (June)	$ 105,400	$ 41,047	39%
2011 YE projection	$ 105,400	$ 102,095	97%
2012	$ 40,055	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	210	84	40%
2009	274	269	98%
2010	264	193	73%
2011 YTD (June)	238	78	33%
2011 YE projection	238	194	82%
2012	238	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	12,766	5,107	40%
2009	16,648	16,355	98%
2010	16,040	11,734	73%
2011 YTD (June)	13,353	4,368	33%
2011 YE projection	13,353	10,864	81%
2012	10,186	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	255,325	102,144	40%
2009	332,961	327,104	98%
2010	320,801	234,688	73%
2011 YTD (June)	267,064	87,360	33%
2011 YE projection	267,064	217,288	81%
2012	122,237	n/a	-

SCG Standard Filing Requirement

Water Heating

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 5,526	$ 3,692	$ 2,188	$ 22,610	$ 858	$ 2,658	$ 5,000	
Outside Service	n/a	n/a	$ 6,756	$ 5,691	$ 3,147	$ 2,638	$ 1,686	$ 2,637	$ 2,638	
Materials & Supplies	n/a	n/a	$ -	$ -	$ -	$ 496	$ -	$ 496	$ 496	
Incentives	n/a	n/a	$ 35,120	$ 81,264	$ 66,725	$ 85,780	$ 31,770	$ 79,770	$ 28,600	
Marketing	n/a	n/a	$ 794	$ -	$ 1,169	$ 7,477	$ 1,474	$ 6,874	$ 7,477	
Administrative Expense	n/a	n/a	$ 241	$ 355	$ -	$ 2,000	$ -	$ 2,000	$ 2,000	
Total			$ 48,438	$ 91,003	$ 73,228	$ 121,000	$ 35,788	$ 94,435	$ 46,210	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	6,627	16,173	14,349	16,012	3,472	9,162	12,241	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	137,408	323,456	286,976	320,244	69,440	183,234	146,890	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 7.31	$ 5.63	$ 5.10	$ 7.56	$ 10.31	$ 10.31	$ 3.78	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.35	$ 0.28	$ 0.26	$ 0.38	$ 0.52	$ 0.52	$ 0.31	e=a/c
Total Gas Benefit	n/a	n/a	$ 281,794	$ 270,601	$ 259,793	$ 222,424	$ 48,229	$ 127,264	$ 79,058	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 5.82	$ 2.97	$ 3.55	$ 1.84	$ 1.35	$ 1.35	$ 1.71	g=f/a
Homes Served	n/a	n/a	109	266	236	286	62	164	286	h
Lifetime Savings per Home (ccf)	n/a	n/a	1,261	1,216	1,216	1,120	1,120	1,120	514	i=c/h
Program Cost per Home	n/a	n/a	$ 444	$ 342	$ 310	$ 423	$ 577	$ 577	$ 162	k=a/h
Benefit per Home	n/a	n/a	$ 2,585	$ 1,017	$ 1,101	$ 778	$ 778	$ 778	$ 276	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 121,000	$ 48,438	40%
2009	$ 121,000	$ 91,003	75%
2010	$ 121,000	$ 73,228	61%
2011 YTD (June)	$ 121,000	$ 35,788	30%
2011 YE projection	$ 121,000	$ 94,435	78%
2012	$ 46,210	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	250	109	44%
2009	318	266	84%
2010	311	236	76%
2011 YTD (June)	286	62	22%
2011 YE projection	286	164	57%
2012	286	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	15,198	6,627	44%
2009	19,329	16,173	84%
2010	18,924	14,349	76%
2011 YTD (June)	16,012	3,472	22%
2011 YE projection	16,012	9,162	57%
2012	12,241	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	303,958	137,408	45%
2009	386,587	323,456	84%
2010	378,488	286,976	76%
2011 YTD (June)	320,244	69,440	22%
2011 YE projection	320,244	183,234	57%
2012	146,890	n/a	-

CHAPTER THREE: COMMERCIAL AND INDUSTRIAL PROGRAMS (Electric and Natural Gas)

C & I Overview

Vision Statement

The EEB C&I Committee, comprised of business, utility and agency representatives, continues to conduct a strategic examination of the C&I programs under the overarching principles defined in the C&I Vision Statement ("Vision"):

The overall Vision for the future evolution of the Energy Efficiency Fund's C&I programs is to cost-effectively support a sustainable and competitive business climate for Connecticut's businesses, state and municipal facilities, and industries based on bottom-line solutions for economic competitiveness, environmental stewardship, and social responsibility.

Consistent with this vision, the C&I programs continue to evolve to assist Connecticut business, manufacturing, institutional, state and municipal facilities meet regional and global competitive challenges, while providing energy-system benefits to all of Connecticut's electric and natural gas customers.

The key themes of the C&I programs are to:

- promote bold and meaningful savings goals (30 – 50 percent +) through energy efficiency, load management and on-site generation that will help all C&I consumers have a real impact on their energy bills, contribute to their productivity, and enhance their competitiveness;
- achieve large increments of efficiency through high-performance buildings, systems and industrial processes. A high-performance building or facility uses less energy, provides superior indoor environmental quality, enhances worker productivity and well-being, and improves the bottom lines of developers, owners and tenants;
- provide comprehensive business energy solutions that integrate energy efficiency, load management, distributed generation, renewable energy systems and designs, and other related initiatives into a cost-effective, comprehensive solution for businesses, and
- support businesses in making energy management an integral part of their business practices and corporate culture.

The EEB and the Companies believe that this vision and accompanying principles are fully consistent with the Administration's and Legislature's vision for an energy efficient and prosperous Connecticut.

Innovative technologies, enhanced and competitive building design and operational practices are constantly on the rise. As such, comprehensive whole-building initiatives, education, financing and incentive transformation must also increase. In order to meet the challenges, the C&I portfolio

continues to undergo transformation as well. Since the 2010 Plan, retrofit program incentive designs have successfully encouraged many customers to implement energy-efficiency projects using a comprehensive or "whole-building" approach to obtain deeper reaching savings. Plans call for this successful initiative to be continued in 2012, while being ever-cognizant of incentive cost rates. Additionally, educational offerings continue to evolve to assist our C&I customers and trade allies in meeting their competitive challenges. To that end, the Electric and Natural Gas Companies have continued to research new training opportunities for customers and trade allies on a wide variety of subjects to support the ongoing education process. This includes continued code training for architects and engineers in partnership with the Connecticut Chapter of the American Institute of Architects ("AIA"), the American Council of Engineering Companies ("ACEC") of Connecticut, ("ASHRAE"), and the Connecticut Society of Professional Engineers ("CSPE").

With the advances in technology, the C&I programs will begin to focus on efforts to educate customers about real-time feedback using "energy dashboards" on building operations including the options of failure analysis that is beginning to develop as an industry. ECSU, for example, has taken a critical step forward in this effort (Ref: http://ecsu-facilities.easternct.edu/ECSUEnergyDash/). This type of energy monitoring system, along with the associated activities in behavioral changes through the Business Sustainability Challenge, will set the foundation for customers to see savings closer to the event of implementation instead of a month or year later. It is anticipated that the "energy dashboards" will facilitate more proactive customer behavior with regards to energy management and building operations.

State Buildings – Legislation to Reduce Energy Consumption

Section 118 of Public Act 11-80 assigns DEEP a two-staged goal: (1) reduce State building energy consumptions by 10 percent by January 1, 2013 and (2) reduce State building energy consumption an additional 10 percent by January 1, 2018. In response to the first goal, the Companies have offered the EEB a proposal which would target many of the state's smaller, inefficient facilities with a focus on implementing standard energy-saving measures such as (but not limited to) lighting, lighting controls and HVAC retrofits. The Electric Companies propose utilizing their existing network of Small Business Energy Advantage ("SBEA") program vendors, working under an agreement similar to the previously executed contract in place between CL&P and DAS in December, 2007. Projects would be funded using a combination of incentives and near zero percent financing. The Companies are also currently engaged with officials at DEEP in an effort to develop a plan for funding existing efficiency projects (currently on-hold) through the use of State bonding. The Companies are also helping to coordinate efforts to ramp up efforts on large-scale performance contracting projects for state and municipal facility portfolios. Simultaneously, the EEB has prepared a Green State Buildings Plan that proposes a comprehensive strategy for the State to a) cost-effectively meet its near-term goals through improved building O&M, while b) laying the groundwork for much deeper savings through high performance building upgrades.

Performance Contracting – Evolving Toward Broad Utilization

Energy Performance Contracting is a strategy used to deploy deep and broad-reaching energy efficiency upgrades by allowing the energy cost savings from facility upgrades to pay for those same upgrades. As one of the primary tools utilized by large Energy Services Companies ("ESCOs"), the concept of Energy Savings Performance Contracting (ESPC) has been in practice for many years around the country and the utilities have always played a role in assisting the MUSH market (Municipalities, Universities, Schools and Hospitals) with this process. In addition to the energy savings potential in the MUSH market, Connecticut's State facilities are another large sector with the potential for large comprehensive energy savings. Energy Performance Contracting encourages these comprehensive upgrades because the associated costs are usually paid through energy savings and/or financing. Efficiency measures typically provided through a performance contract are lighting systems; heating, ventilation, and air conditioning systems; energy management systems; water use systems; central plant equipment; chillers; boilers; pumps; air compressors; domestic water equipment; and the building envelope including insulation, roofs, and windows. The other benefit of performance contracting is that the project will typically be based on guaranteed savings over time which lends itself to deeper levels of optimization and preventative maintenance.

Recent Activities:

In its decision dated January 6, 2011 in Docket No. 10-10-03, the Department issued Order No. 25 ("Order") which requires that, "The EDCs shall conduct a workgroup to promote best practices and develop a standardized performance contract to submit in the next annual Plan, as described in Section II.D.2., herein. The EDCs shall report quarterly on the milestones of the workgroup toward the goal of developing a standardized performance contract for the 2012 Plan."

In May, the EDCs, in collaboration with the EEB, formed a Performance Contracting Working Group. The working group is comprised of individuals representing large nationally recognized energy service companies, a national Energy Services Coalition, municipal government (Fairfield and East Hartford), environmental advocates (Clean Energy Finance Center, Clean Water Action and Woodbridge Clean Energy Initiative Task Force), state government (Department of Construction Services, Department of Energy and Environmental Protection, Attorney General), the EDCs and the EEB. These individuals have either direct or indirect experience with ESPC and also share a professional and personal commitment to energy efficiency throughout the State. With the assistance of a dedicated ESPC expert as the facilitator, the working group has developed guidelines, process flows, best management practices, and templates for bid documents, implementation agreements with standardized language and definitions. The resulting recommendations from the working group have been presented to the EEB and have provided the basis for proposed supporting activities through the CEEF programs. The EEB's C&I Committee will assist, encourage and support the Companies in developing performance contract tools and templates and innovative financing as proposed by the Plan.

Reinforcing the State's commitment to all cost-effective energy efficiency, the Legislature in June explicitly authorized energy savings performance contracting was through Section 118 of Public Act 11-80, creating more opportunities to assist in the planning of energy efficiency upgrades to state agencies throughout Connecticut, and potentially increasing participation in customer-funded energy efficiency programs. These clear and detailed policy objectives have been incorporated into this Plan as they pertain to state facilities.

Follow-Up for the Plan:

As of this filing, the Companies have provided three (3) quarterly reports to the Department on the status of the efforts to convene a workgroup to promote best practices and develop a standardized performance contract. As summarized in these quarterly reports, the Companies worked with Chris Halpin of Celtic Energy, a Connecticut-based expert on performance contracting, to coordinate a workgroup to promote best practices and develop a standardized performance contract. The goal is to ensure the development of a performance contract process that best serves the overall interests of customers, the Department and the Energy Efficiency Fund. More specifically, the intent is to move forward with the development of a standardized performance contract template and resource tools to assist municipalities and the state. The objective is to introduce lessons learned from across the country and here in Connecticut.

The working group's recommendations have been presented to the EEB and have provided the basis for proposed supporting activities through the CEEF programs.

Economic Impacts/Budget Disparity

The C&I budget has had to respond to a variety of economic conditions, legislative actions, and an annual budget approval process that created a "roller coaster" atmosphere resulting in program years with budgets being overspent and in other years, a budget surplus. In both cases, there is a corresponding impact on the following year's budgets and these impacts may be different for each utility. The end result is that a large budget disparity exists throughout the State which has been influenced by not only the diversity and size of the utility service territories, but by a variety of other factors such as the economy and competition for contractor resources with neighboring states that offer significantly higher program incentives.

As a result of these challenges, the need existed for the Companies to deploy different incentive structures and/or cost caps over the course of the program year to effectively manage program budgets and respond to differing market conditions in each of the Companies' service territories. These incentive structures included targeted increased incentives and marketing efforts at one utility, while the other utility may implement cost containment measures such as lower cost caps. Over the years, flexibility has proven to be vital for implementing cost-effective, energy-efficient projects in both service territories.

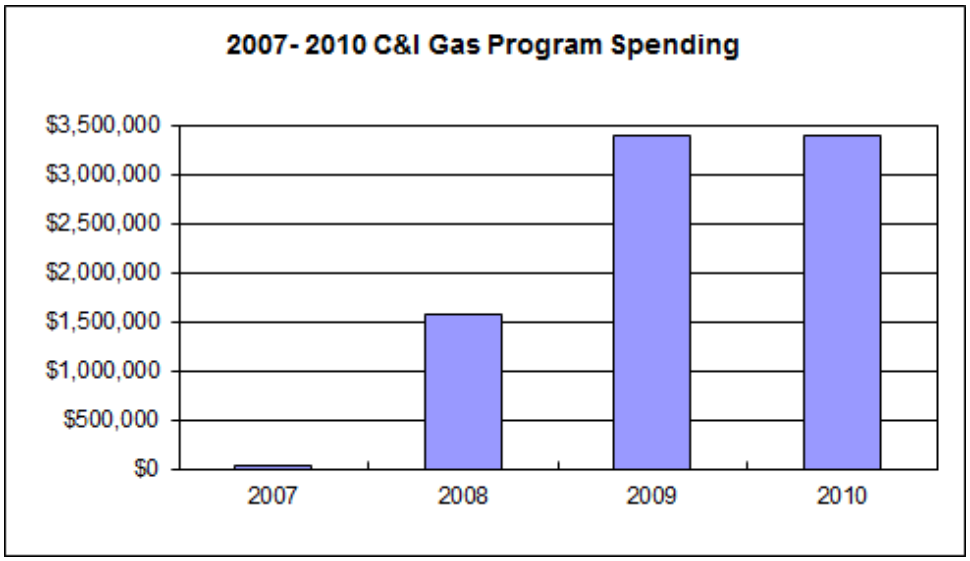
As a result of last year's final decision (Docket #10-10-10) the PURA approved the Companies' plan to simplify program incentive caps and improve transparency. This approval allowed the Companies to utilize published unit incentive cost rate caps. This successful strategy, launched in January 2011, will continue to provide program incentive transparency while continuing to allow for greater flexibility and better project incentive costs management. This strategy will also be continued for the gas program incentive structures as well.

In an effort to facilitate the implementation of energy efficiency improvements within Connecticut's "state owned or leased" building stock and the realization of DEEP's energy efficiency goals, the Companies recommend implementing "multi-year" or long range budget planning. This change will also allow State agencies to synchronize their projects with their fiscal year obligations and with the Fund budget cycles, ensuring that funding is available. In addition, "multi-year" planning would help stabilize the market place and customer expectations helping to minimize the "roller-coaster" effect that incentive programs have experienced in the past.

Growth of Natural Gas Energy Efficiency Budgets and Participation

The natural gas elements of the C&I programs have continued to mature and participation in the natural gas programs has steadily increased since their introduction in 2008. Proposed for 2012 is a combined C&I budget of $7.25 million dollars which is an increase of 10.5 percent relative to the approved 2011 C&I budget. This represents more than a doubling of the C&I natural gas program budgets since 2008.

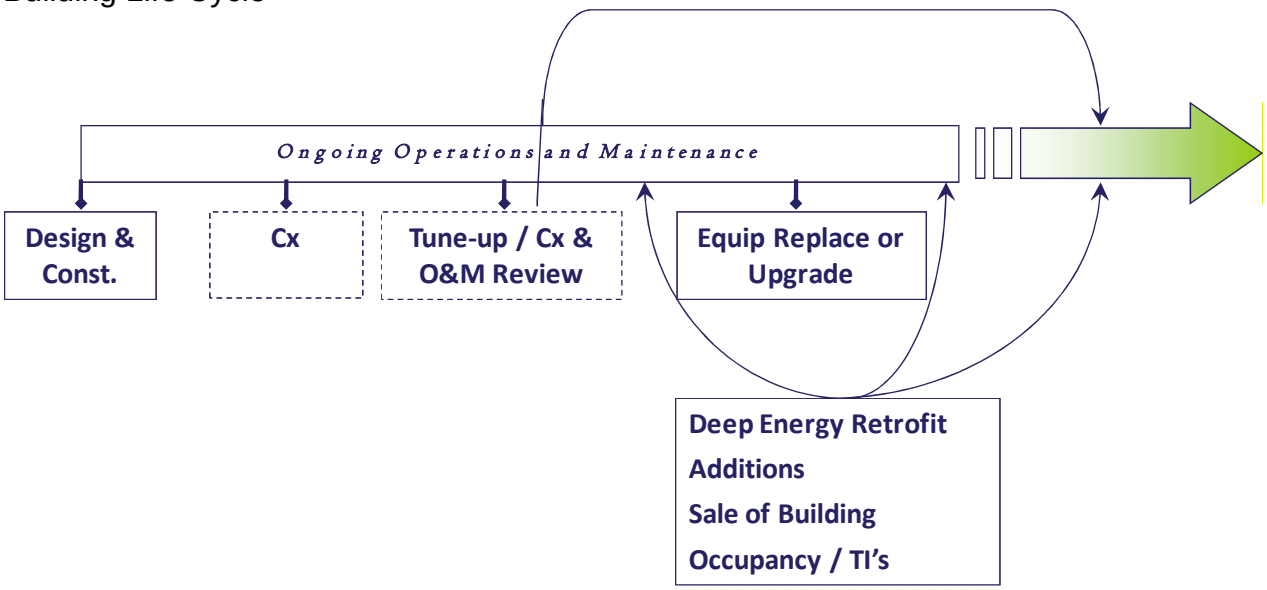
In concert with the increased gas budgets, the Companies are continually expanding the scope of gas measures to facilitate increased customer participation. As examples, the Companies have added incentives or rebates for high efficiency gas fired heat pumps and both high and low intensity infrared gas heating to the existing portfolio. Please refer to the incentive tables located in the appendix at the back of Chapter 3. The Companies will also be introducing a portfolio of measures specific to the SBEA program (please refer to the SBEA section of Chapter 3 for more information).



Sustainable Energy Management – A Paradigm Shift

Consider the life of a building as a continuum from design and construction to demolition (or major renovation) over an extended period of time (30 - 100+ years.) There are natural events in the building's life that directly affect building systems efficiency. These natural events include design and construction; equipment upgrades and retrofits; major renovations and additions; and tenant improvements or new tenants. Underlying all of these natural events is the operations and maintenance of the energy systems. By being responsive to the natural cycles for building improvements and the ongoing need for high performance facility management, CEEF's C&I programs can be much more effective in achieving deeper and more cost-effective energy savings through both comprehensive building upgrades, sustainable building operations and maintenance, and sustainable practices by building owners, managers and users. The programs will increasingly employ this strategic framework when promoting and delivering the C&I program offerings and services to better meet the customer needs and achieve the intended goals.

Building Life Cycle



(Illustration courtesy of Jim Volkman – Strategic Energy Group)

On the operational front, numerous studies have demonstrated that energy consumption can be reduced by 10-20 percent through building tune-ups, with deeper savings available through the retro-commissioning of commercial buildings. The challenge is how to maintain high performance in both new and upgraded buildings. The answer seems to be through improving building operations and building operator capability, but also by changing the behavior of the building's occupants and facility operators so that they actually "do" what is needed.

When examined from the perspective of optimal building performance, it helps to think of operations as separate from maintenance. While maintenance activities (filter changes, typical preventative maintenance (PMs), painting, window washing, etc.) are usually performed on a regular basis, little thought is typically given to proactive operations, particularly from an energy performance perspective. The result is generally poor building operating performance.

Enhanced operations activities beyond the basic maintenance type mentioned above should include:

- Monitoring, tracking, and reporting building energy use on a regular basis
- Regular review and improvement of building systems documentation
- Monitoring of key performance indicators of equipment and systems to identify when performance is slipping
- Modification and regular review of existing scheduled preventive maintenance activities to maintain building performance
- Developing technical expertise through training and other professional development activities
- Problem solving and root cause analysis in problem or suspicious areas.

Trying to address the enhanced O&M market is difficult at best. The most likely points of engagement by the Companies are the natural events in a building's life. Beginning in 2012, the Companies will focus attention on how to help customers understand the "roadmap" of activities and programs related to building design, construction, operation and maintenance. This roadmap of activities includes coordinating the necessary tools and training along with helping to change the existing culture of the occupants and operators alike.

To better reflect this refocused view of the O&M environment, the 2012 Plan is bringing the existing O&M Services, Retro Commissioning, Business Sustainability Challenge, Process Re-engineering for Increased Manufacturing Efficiency ("PRIME"), and Education and Outreach programs under one umbrella named the **Business and Energy Sustainability Program.**

Energy Conscious Blueprint

The Energy Conscious Blueprint ("ECB") program serves the new construction and equipment replacement markets. Energy Efficiency Program Administrators around the country classify programs like ECB as "lost opportunity" programs. The name lost opportunity implies that without active involvement by program administrators in the marketplace, customers, contractors and design professionals would design and install new buildings to "code" or would replace failed equipment with that having efficiency levels that only meet older, more standard design practices. In their September

2008 white paper entitled, "Lost Opportunities in the Buildings Sector: Energy-Efficiency Analysis and Results[12]," the authors from Pacific Northwest National Laboratories (PNNL) explain the term as follows:

> "… lost opportunities, while a significant increase in effort and impact in the buildings sector, still represent only a small portion of the full technical potential for energy efficiency in buildings. Such national-scale benefits will not be realized without a more aggressive national program, and are thus "lost opportunities" if not captured now. It is much more cost-effective to realize profound improvements in building performance at the time of construction; once a building is constructed, it is not cost effective to realize similar levels of performance, and thus the opportunities are "lost."

The new construction market continues to be adversely impacted by the ongoing downturn in the economy. As a result, replacement of old equipment and adding new equipment currently comprises the majority of new ECB program activity. In addition, major building renovations and other code regulated events will likely dominate ECB activity in the next few years and offer important opportunities for achieving deeper and more sustainable energy savings through high performance design guidelines, commissioning services and other CEEF supported strategies.

In 2012, the ECB program will continue to focus on achieving results beyond code. As described in the discussion of Connecticut State Code below, codes are becoming ever more stringent and are driving toward whole- building performance. In recognition of the direction codes are moving and being consistent with the overall C&I program vision, the ECB program is being enhanced to assist the marketplace in making this transition. To that end, the ECB program will continue to offer two program tracks for new construction activities in 2012: (1) traditional measure-based and (2) whole-building performance. The traditional measure-based track will offer prescriptive and custom-based installation incentives consistent with existing program design.

The whole-building performance track recognizes the variability in setting code baselines when working to the requirements of design processes for high-performance buildings such as Leadership in Energy and Environmental Design ("LEED") or Green Globes wherein the whole building is modeled against a baseline set by the design professional and achieves a score based, in part, on overall energy and demand savings. To facilitate this whole-building design approach, the Companies will continue to offer financial assistance helping customers model their projects using hourly simulation programs broadly offered in the market along with cash incentives on a per-square-foot basis on a basic tiered approach. In this way, customers are assisted and incentivized to go beyond code. In addition, when linked with sustainable energy management, the programs work to ensure that buildings are actually performing at high levels while providing meaningful bill reductions.

[12] Lost Opportunities in the Buildings Sector: Energy-Efficiency Analysis and Results, JA Dirks, DB Belzer, DM Anderson, KA Cort, DJ Hostick (September 2008), Pacific Northwest National Laboratories

Connecticut State Code

Building energy codes continue to receive great attention as a cost-effective method to increase efficiency levels in buildings and to reduce carbon emissions. The Department of Energy (DOE) has laid out a path to increase stringencies in energy codes to achieve an 83 percent reduction in carbon emissions by 2050. DOE also recognizes that compliance with the energy code is even more critical than having a code with higher levels of efficiency. Connecticut, as one of the covenants to receiving Federal stimulus funds, has agreed to adopt ASHRAE/IESNA Standard 90.1-2007 (reference document for the 2009 IECC) for commercial construction and to create a plan to achieve 90 percent compliance with the energy code by December 2017.

Connecticut is planning to adopt the 2012 editions of the International Building Code (IBC), International Existing Building Code (IEBC), International Mechanical Code (IMC), International Plumbing Code (IPC), and the 2011 National Electrical Code (NFPA-70) as the next State Building Code late in 2012 or early 2013. The 2009 IECC and 2009 IRC will be readopted as part of the next State Building Code. Adoption of the 2012 IECC and the 2012 IRC as amendments to the next State Building Code will follow, possibly in late 2013. The proposed energy codes, when adopted, will affect new construction and building renovation projects that participate in the Fund's programs. Besides increasing the stringency, the adoption of the 2012 IECC will have major impacts on the design process and professional practice.

The Companies will continue to support the adoption of the latest model energy code and will continue to work with design and construction community to increase understanding of and compliance with the new energy codes. The Companies will also continue to structure program incentives for new construction to encourage owners, design professionals and contractors to go beyond the code requirements. However, the companies also believe that code compliance is more important than having a more stringent code that is not adhered to in practice.

There are two major questions that need to be answered about code performance. The first is to quantify what is the current rate of compliance. The second is to determine what factors or issues are causing the current compliance rate and ongoing building performance levels. These questions can each be answered by separate baseline and building performance assessment studies, or through a combined study. Current indications from DOE pilot projects is that these studies are complicated, time consuming, and expensive. It is important to emphasize that the ultimate goal of ECB and Connecticut's building code is to ensure that newly constructed or renovated buildings are actually performing at the designed levels and that building owners and users are deriving the intended benefits from high performance design standards.

The first question needs to be answered by the state so that it can plan to meet its 90 percent compliance commitment. However, the state may not have the funds to perform the study. The Companies agree that it would be appropriate to use Fund dollars to improve the robustness of the

state's study or to help the state meet its commitment. This study should be performed as soon as possible so that there is time to take actions to achieve 90 percent compliance by December 2017.

The answers to the second question will provide useful information that is important to the continued successes of the ECB program. The Companies can use the information to plan training and to modify program structure to increase the compliance rate. The information may also be used by the state in the planning process to achieve the 90 percent compliance commitment. Also, building performance information will provide critical guidance to the programs to ensure that actual savings are occurring at the intended levels.

Code compliance is an interactive effort based on the actions of the building owners, building officials, design professionals and building professionals (contractors and trades). The resulting compliance rates are based on the actions or inaction of each entity involved in the design/construction/enforcement process. Then after occupancy, the resulting efficiency level or performance is either negated or enhanced by the knowledge and ability of the facility's team. The Companies will continue to work with all stakeholders to achieve the ultimate goal of increased levels of energy efficiency.

Connecticut is anticipated to adopt the 2009 International Energy Conservation Code ("IECC") as an amendment to the 2005 State Building Code late in 2011. A condition of receiving the American Reinvestment and Recovery Act ("ARRA") stimulus funds is the adoption of the IECC by the governor. Connecticut is also anticipated to adopt the 2009 International Residential Code ("IRC") as an amendment to the 2005 State Building Code in the first half of 2012. The adoption of the IRC is required to coordinate the efficiency requirements of the 2009 IECC for one and two-family homes.

The proposed energy codes, when adopted, will affect new construction and building renovation projects that participate in the Fund's programs. Besides increasing the stringency, the adoption of the 2012 IECC will have major impacts on the design process and professional practices.

There have been many supporting activities in the past year in preparation for the energy code changes. The Companies have taken every opportunity to inform the design and construction communities about the upcoming energy code changes. The State of Connecticut has offered multiple free training sessions on the 2009 IECC and ASHRAE/IESNA Standard 90.1-2007. The Companies have partnered with the American Institute of Architects Connecticut ("AIA-CT"), American Council of Engineering Companies of Connecticut ("ACEC/CT"), Connecticut Society of Professional Engineers and Connecticut Building Officials Association ("CBOA") in sponsoring the "Working Together for Energy Code Compliance" forum. The forum was also used as a platform to announce the placement of sample energy code compliance documentation spreadsheets on the AIA web page. The Companies also have worked with the Office of Education and Data Management, the Institute for Sustainable Energy and the Energy Office to develop energy code and construction practices training for the construction trades.

The Fund programs, over their life spans, have played an essential role in creating the market, political and societal conditions that facilitate code and standards improvements, by working with customers and their vendors to improve underlying practices as they relate to energy use. The Companies will continue developing a transition plan to help the building industry prepare for the adoption of higher building codes and regional standards for a variety of consumer products, including electronics. In addition, the Companies, in collaboration with the EEB, will examine the opportunities to ensure actual high performance in new construction and building renovation projects through innovative strategies such as commissioning and web-based monitoring and tracking services. The description for residential programs and commercial and industrial programs provide more detail concerning this strategy.

Energy Opportunities Program Overview

Comprehensiveness, High-Performance Lighting, and Performance Contracting

In 2011, the Energy Opportunities Program continued with the successful "comprehensive" initiative, increased focus on higher performance lighting technologies (solid state LED and induction lighting) and targeted efforts to eliminate older fluorescent (T12) lighting technologies from customer facilities.

The comprehensive initiative encourages customers, engineers and contractors to look beyond the "low-hanging fruit" to achieve broader and deeper savings. Comprehensive projects are eligible for higher incentives if they are comprised of multiple measures representing at least two or more end uses (i.e., lighting, HVAC, Process) and at least 15 percent of the project's annual kWh savings and peak summer kW savings is from a non-lighting end use(s). Another benefit of offering a comprehensive initiative is that the projects can include measures that help optimize the specific energy consuming systems, such as chilled water or compressed air systems.

The increased focus on higher-performance lighting technologies provides higher potential incentives for qualifying LED or induction lighting. Qualified LED fixtures must be ENERGY STAR –qualified or approved through the Northeast Energy Efficiency Partnership ("NEEP") Design Lights Consortium or DLC (http://www.designlights.org/). The DLC is a collaboration of utility companies and regional energy efficiency organizations (across the country and Canada) and is committed to raising awareness of the benefits of efficient lighting in commercial buildings. Its mission is to help builders, architects, designers, and commercial property owners to implement improved design practices in all areas of the commercial lighting market. Its goal is to ensure that high quality, energy-efficient lighting design becomes commonplace in all lighting installations.

These initiatives will likely be continued in 2012, however the incentive values and capping mechanisms may be adjusted as needed based on available budgets, market conditions and customer response with a published incentive structure. In addition, increased emphasis will be placed on the use of performance contracting; innovative, third-party financing; and other supporting services to achieve greater leveraging of CEEF funds while achieving more comprehensiveness. Finally, there will be increased efforts to promote and deliver EO services and offerings in conjunction with the Sustainable

Energy Management framework in an effort to achieve deeper and more sustainable savings. Please refer to the incentive tables located in the appendix at the back of Chapter 3.

Small Business Energy Advantage Program Overview

In 2011, the Small Business Energy Advantage ("SBEA") Program also continued with the successful "comprehensive" initiative, with increased focus on higher performance lighting technologies (solid state LED and induction lighting) and targeted efforts to eliminate older fluorescent (T12) lighting technologies from customer facilities.

In addition, the Companies improved the consistency of the statewide program offering with both companies currently utilizing a common program eligibility level of customers up to 200 kW.

In 2012, the Electric Companies will continue to offer the comprehensive initiative encouraging customers to go beyond the "low hanging fruit" and achieve broader and deeper savings, where it is economically feasible. New for 2012, the SBEA Program will plan to incorporate a portfolio of gas saving measures, operating with a specific program budget, and offering zero percent (0%) on-bill re-payment financing. In addition, the SBEA program will, in collaboration with the EEB, review current progress and new strategies for reaching under-served, small-business market segments, especially in economically impacted communities.

Energy Project Financing

The 2012 C&LM Plan includes several existing financing options for business of all sizes and will introduce new opportunities including zero percent, on-bill financing of natural gas measures for Small Business Energy Advantage program participants. In addition, increased emphasis will be placed on the use of performance contracting, third-party financing and other supporting services to achieve greater leveraging of CEEF funds while also achieving deeper, more comprehensive savings.

Details of all the existing and new options are detailed in Chapter 5.

C&I NEW CONSTRUCTION

Energy Conscious Blueprint (Electric and Natural Gas)

Objective:

The objective of the Energy Conscious Blueprint ("ECB") program is to maximize electric and natural gas energy savings for "lost opportunity" projects, at the time of initial construction/major renovation, or when equipment needs to be replaced or added. ECB is structured to minimize these "lost opportunities" by: (1) introducing energy efficiency concepts to customers, architects, engineering firms, contractors, commercial realtors, trade allies, etc., (2) demonstrating the benefits of selecting efficient options during the design stage, and (3) working with the design community to convince customers that more benefits are achievable by designing for whole-building operations and operating conditions.

Target Market:

The ECB program specifically targets C&I customers of all sizes (including municipalities) that are planning projects involving new construction, major renovation, and tenant fit-out and/or major equipment replacement.

Owners and managers of multi-family residential buildings may also participate in the ECB program. They represent a target market that often straddles the eligibility requirements of both C&I and residential program offerings.

ECB will continue to provide both electric and natural gas energy efficiency measures to customers using integrated program delivery. This delivers a simpler and more streamlined experience for the customer and provides a more comprehensive package for achieving greater energy efficiencies within their facilities.

Program Description:

The ECB program promotes energy efficiency for C&I projects involving new construction, major renovation, tenant fit-outs, and equipment replacement and additions. The program seeks to increase the energy efficiency and performance of lighting systems, heating, hot water, ventilation and air conditioning systems, motors, processes, and other energy components of C&I buildings or projects. This program offers a variety of services and incentives, including technical and financial assistance from design through construction. The types of services and incentives are based on the proposed project's complexity, energy savings potential, scope of work, and the desire of the owner and his/her design team to participate.

The program is evolving towards compliance with high-performance building standards. While this is currently required for state funded buildings, it is still only an option for other customers. For those

required or desiring to use whole-building energy-performance requirements, a minimally compliant design will be treated as "code". Equipment and systems that generate energy savings and demand reduction above the project-specific code baseline will be eligible for custom ECB incentives.

Marketing Strategy:

While the target of this program is ultimately the customer, enrollment is largely driven by such market actors as architects, contractors, engineers, equipment suppliers, service companies, and other allies of the "building environment" community. As such, a primary strategy is to promote the ECB program directly to these groups using such tactics as:

- paid advertising (print and electronic) in local and regional trade publications (directing audiences to the Electric and Natural Gas Companies' web sites, CTEnergyInfo.com and the WISE USE number);
- targeted mailing of program literature utilizing association lists, and purchased lists, and
- booth presence at strategically selected trade shows.

Another tactic is to promote ECB to building owners and business owners (who are not necessarily the same people), facilities managers and energy managers -- individuals existing in a different environment than the building community members. Promotion tactics may include:

- paid advertising (radio, print and electronic) in broadcast outlets, local and regional business publications directing audiences to the Electric and Natural Gas Companies' web sites, CTEnergyInfo.com and the WISE USE number;
- booth presence at strategically selected business expos;
- participation in strategically selected conferences similar to but not limited to the Edison Electric Institute's National Accounts conferences;
- contacting decision-makers as early as possible in the design or equipment selection stage of their projects when energy efficiency is most cost effective, and
- utilizing construction reports such as Construction Data Company ("CDC"), to monitor upcoming projects throughout the state and to obtain key project contact information.
- In addition to program-specific promotion, marketing efforts will also include actions intended to support C&I customers and the building community, and to further the cause of market transformation. This support may include:

- writing and distributing case studies (also referred to as Success Stories [13] or Testimonials) to the sites listed above and to local media and national/regional trade publications;
- promoting Fund-sponsored technical training seminars via e-mail and newsletters;
- hosting contractor meetings, and
- participation in associations through memberships and events.

Incentive Strategy:

As the program transitions toward the anticipated 2012 codes and standards and continues the promotion of whole-building performance, incentives will remain in two tracks. The Prescriptive Measure Track will continue to be based on the energy efficiency of a design and incremental costs between less expensive, prescribed code-compliant efficiency equipment and a more expensive, high-efficiency option. Prescriptive, incremental-cost-based equipment incentives will continue to be measured against cost-effectiveness equipment criteria to ensure that enough energy savings are attained to justify the incentive.

Since becoming effective in January 2011, the Whole Building Performance Track has been providing custom incentives to customers and their design teams based on the level of building performance that is designed and installed relative to the building code.

The Prescriptive Measure Track incentives will continue to provide incentives based on a percentage of the incremental equipment cost associated with the installation of efficient systems and equipment, compared to the cost of code- compliant standard design practice. The program includes incentives for the more common energy component standards (lighting, HVAC, VFDs, motors, etc.), as well as any other energy-saving technology where extra costs, relative to established baseline, can be justified by the energy savings. The program encourages customers to go beyond customary standards by recognizing the associated increased difficulties and costs.

The Whole Building Performance Track, on the other hand, will continue to offer the design team members financial assistance (expressed in dollars per square foot) for modeling and integrating multiple qualifying energy-efficient measures into a building's design. Then, upon installation, the Whole Building Performance Track will pay the customer an installation incentive. The installation incentive is based on the criteria that the amount increases commensurate with the percentage of improvement in a whole building's energy efficiency relative to the design team's base plan. This unit incentive is expressed in dollars per square foot and is in the range of $0.10 - $2.00 per square foot. Finally, the Whole Building Performance Track pays the customer a fixed amount, based upon a sliding scale,

[13] One example of a Success Story:
http://nuwnotes1.nu.com/apps/clp/clpwebcontent.nsf/AR/CNCSoftware/$File/CNCSoftware.pdf

(expected range: $5,000 - $15,000) if they provide certification of LEED Silver, Gold or Platinum (or 2, 3 or 4 Green Globes).

Also effective in January 2011, the Companies began to implement an incentive cap based, in part, upon customer payback, for custom process equipment measures. The payback incentive cap criteria results in an incentive that limits the customer's net simple payback to no less than 18 months.

The Companies will continue to utilize incentive caps that will impose, where practical, published unit cost rate caps (on a cost-per-annual-energy-saved basis along with a cost-per-peak demand-saved basis). This continuing effort has been very effective in providing a high level of transparency (to the marketplace) while continuing to better manage project incentive costs. In addition, the EDCs may employ a maximum incentive cap either on a per customer Federal Tax ID, per customer account, or per project basis, in order to make ECB funds available to more customers. Regardless of which incentive mechanism is offered to the customer, it will be pro-rated between electric and natural gas ECB budgets, using the percentage split of the customer's energy cost savings between the two energy sources. Please refer to the incentive tables located in the appendix at the back of Chapter 3.

Goals:

Refer to Standard Filing Requirements for program goals.

New Program Issues:

To minimize the impact of large incentive dollar value projects on approved budgets, the Natural Gas Companies will continue to exclude natural gas projects with customer incentives in excess of $100,000 from 2012 C&LM Plan natural gas budgets and projects with customer incentives in excess of $100,000 will be submitted to the Department for approval.

It should be noted that the Companies are continually increasing the scope of gas measures to facilitate increased customer participation. As an example, the Companies have added incentives for high efficiency gas fired heat pumps and both high or low intensity infrared gas heaters to the existing portfolio.

Additionally, the lessons and opportunities learned in the Retro Commissioning program projects over the past years will be woven in to the ECB new construction building program through the new building enhanced commissioning opportunity.

CL&P Issues:

UI Issues:

CL&P Standard Filing Requirement

Energy Conscious Blueprint

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor								
NU Labor	$ 1,329	$ 1,024	$ 1,053	$ 520	$ 916	$ 950		$ 950
Contractor Staff	$ 208	$ 288	$ 383	$ 212	$ 333	$ 321		$ 321
Total Labor	$ 1,537	$ 1,312	$ 1,436	$ 732	$ 1,249	$ 1,271		$ 1,271
Materials & Supplies	$ 5	$ 5	$ 11	$ 1	$ 9	$ 10		$ 10
Outside Services	$ 582	$ 117	$ 900	$ 41	$ 783	$ 867	a)	$ 861
Incentives	$ 16,228	$ 6,395	$ 6,194	$ 4,486	$ 5,389	$ 6,137	b)	$ 6,097
Marketing	$ 42	$ 154	$ 100	$ 31	$ 87	$ 100	c)	$ 99
Administration Expenses	$ 43	$ 35	$ 48	$ 26	$ 42	$ 48	d)	$ 48
Other	$ 24	$ 14	$ 70	$ 24	$ 61	$ 70		$ 70
Total	$ 18,461	$ 8,033	$ 8,759	$ 5,342	$ 7,620	$ 8,503		$ 8,456

a) Services include technical assistance, analysis, quality control, and inspections.
Budget reflects the need for ongoing engineering and design expertise to address building code changes with the design and contractor community and for equipment replacement projects.

b) Incentives paid directly to customers for the installation of cost effective energy conservation measures.

c) Includes marketing to customers, trade allies, and professional organizations to maintain program momentum.
Marketing is also through construction reports, direct mail, advertising, associations, and promotional items.

d) Employee expenses including mileage, training, conference attendance, and misc.

2012 Goals and Metrics Information

	Program Total	Municipal
Demand Savings (kW reduction Goal)	4,374.8	568.1
Annual Energy Savings (KWh Reduction Goal)	20,054,706	2,604,436
Lifetime Energy Savings (kWh Reduction Goal)	307,731,964	39,964,095
Annual Cost Rate ($/kWh)	$ 0.424	$ 0.424
Lifetime Cost Rate ($/kWh)	$ 0.028	$ 0.028
Electric b/c Ratio	3.21	3.21
Total Resource b/c Ratio	3.95	3.95

CL&P Standard Filing Requirement

Energy Conscious Blueprint

Program Costs

Year	Budget	Actual	% of Budget	$/LT-kWh[1]
2000	$ 7,770,000	$ 6,884,000	89%	0.013
2001	$ 7,878,000	$ 8,193,000	104%	0.011
2002	$ 7,435,000	$ 8,189,000	110%	0.011
2003	$ 5,700,000	$ 5,431,000	95%	0.015
2004	$ 6,250,000	$ 7,288,000	117%	0.012
2005 Revised	$ 8,125,755	$ 5,980,886	74%	0.010
2006 Revised	$ 12,316,230	$ 9,448,615	77%	0.012
2007 Revised	$ 12,417,000	$13,084,740	105%	0.019
2008 Revised	$ 18,278,675	$18,460,585	101%	0.024
2009 Revised	$ 9,920,000	$ 6,756,126	68%	0.018
2010 Revised	$ 13,399,500	$ 8,033,028	60%	0.024
2011 Revised	$ 8,759,606	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 5,341,989	40%	0.068
2011 Y/E Projected	$ 8,759,606	$ 7,620,136	57%	0.028
2012	$ 8,503,250	n/a	n/a	n/a

Goal - Participation

Year	Goal [2]	Actual	% of Goal
2000	6,174	5,719	93%
2001	6,362	6,986	110%
2002	5,937	6,897	116%
2003	210	111	53%
2004	117	132	113%
2005 Revised	216	216	100%
2006 Revised	676	695	103%
2007 Revised	659	603	92%
2008 Revised	1,105	689	62%
2009 Revised	517	390	75%
2010 Revised	503	509	101%
2011 Revised	444	n/a	n/a
2011 YTD (Jun)	n/a	154	35%
2011 Y/E Projected	444	308	69%
2012	484	n/a	n/a

Goal - Lifetime MWh Savings

Year	Goal (MWh)	Actual (MWh)	% of Goal
2000	412,230	511,001	124%
2001	739,115	712,952	96%
2002	605,194	728,424	120%
2003	582,130	355,076	61%
2004	357,198	593,271	166%
2005 Revised	622,846	624,220	100%
2006 Revised	991,250	812,823	82%
2007 Revised	557,085	704,845	127%
2008 Revised	770,793	765,081	99%
2009 Revised	434,848	382,538	88%
2010 Revised	518,987	330,357	64%
2011 Revised	362,214	n/a	n/a
2011 YTD (Jun)	n/a	78,708	22%
2011 Y/E Projected	362,214	276,384	76%
2012	307,732	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	8,878	4,025	45.3%
2004	5,682	10,592	186.4%
2005 Revised	9,579	8,114	84.7%
2006 Revised	9,202	8,771	95.3%
2007 Revised	7,974	9,354	117.3%
2008 Revised	9,868	8,279	83.9%
2009 Revised	6,114	5,331	87.2%
2010 Revised	4,237	4,039	95.3%
2011 Revised	4,237	n/a	n/a
2011 YTD (Jun)	n/a	1,920	45.3%
1 Y/E Projected	4,237	3,292	77.7%
2012	4,375	n/a	n/a

Program Ratios

Year	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.019	0.013	n/a	1,003
2001	0.011	0.011	n/a	1,083
2002	0.012	0.011	n/a	768
2003	0.013	0.015	870	1,349
2004	0.017	0.012	1,100	688
2005 Revised	0.013	0.010	848	737
2006 Revised	0.012	0.012	1,338	1,077
2007 Revised	0.022	0.019	1,557	1,399
2008 Revised	0.024	0.024	1,852	2,230
2009 Revised	0.017	0.018	1,623	1,267
2010 Revised	0.026	0.024	3,162	1,989
2011 Revised	0.024	n/a	n/a	n/a
2011 YTD (Jun)	n/a	0.068	n/a	2,782
2011 Y/E Projected	n/a	0.028	n/a	2,315
2012	0.028	n/a	1,944	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Energy Conscious Blueprint

Budget/FTE

7.0	FTEs for Program administration, site inspection, education of design professionals including State building review with

Goal

	Demand Savings (kW Reduction Goal)	4,375
	Lifetime Energy Savings (kWh Reduction Goal)	307,731,964

Cost/kWh (Cost/Unit)

	$/Annualized kW	$ 1,944
	$/Lifetime kWh	$ 0.028

Goal Setting Methodology

The 2012 planning model is based on 2010 actual results from similar projects, program rules and baseline changes.

Metric Changes

None

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Energy Conscious Blueprint (1, 2)

Baseline Assumptions:

Market C&I new construction, renovation and tenent fit-out program, all C&I customers

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 512,248	$ 526,753	$ 268,722	$ 526,753	$ 537,396	a)	$ 564,266
Contractor Staff	$ -	$ 15,000	$ -	$ 15,000	$ 10,000	b)	$ 10,000
Total Labor	$ 512,248	$ 541,753	$ 268,722	$ 541,753	$ 547,396		$ 574,266
Materials & Supplies	$ 2,507	$ 4,500	$ 4,583	$ 4,583	$ 3,000	c)	$ 3,000
Outside Services	$ 32,453	$ 165,000	$ 5,641	$ 164,917	$ 96,000	d)	$ 96,000
Incentives	$ 4,612,881	$ 2,369,974	$ 1,735,939	$ 2,369,974	$ 1,671,825	e)	$ 1,630,086
Marketing	$ 53,517	$ 40,000	$ 19,886	$ 40,000	$ 30,000	f)	$ 30,000
Other	$ 20,542	$ 11,000	$ 4,401	$ 11,000	$ 8,000	g)	$ 8,000
Administrative Expenses	$ 36,128	$ 42,300	$ 24,720	$ 42,300	$ 30,000	h)	$ 30,000
Total	$ 5,270,276	$ 3,174,527	$ 2,063,892	$ 3,174,527	$ 2,386,221		$ 2,371,352

(1) ECB includes rebate initiatives like Motors and Cool Choice
(2) ECB includes Municipal projects

a) 4.37 FTEs
b) temporary contract services
c) no comment
d) Consultant / Engineering / audit services
e) Customer incentives
f) Brochure revision, selected advertising, public relations, etc.
g) no comment
h) Employee training, mileage, etc.

Goals and Metrics Information:

Savings	2012
Demand Savings (kW)	1,093
Annual Energy Savings (kWh)	6,738,345
Lifetime Energy Savings (kWh)	103,249,390
Annual Cost Rate ($/kWh)	$ 0.354
Lifetime Cost Rate ($/kWh)	$ 0.023
Cost per kW	$ 2,183
Electric System B/C Ratio	3.63
Total Resource B/C Ratio	3.67

The United Illuminating Company
LF-26 Standard Filing Requirement

Energy Conscious Blueprint (1,2)

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$2,812	$2,768	98.4%
2001	$2,313	$2,304	99.6%
2002	$2,083	$2,019	96.9%
2003	$2,390	$1,963	82.7%
2004	$2,347	$2,021	86.1%
2005	$4,045	$3,787	93.6%
2006	$3,170	$3,174	100.1%
2007	$2,922	$5,051	172.9%
2008	$2,627	$3,422	130.3%
2009	$4,855	$4,337	89.3%
2010	$5,156	$5,270	102.2%
2011	$3,175		
2011 YTD (Jun)	$3,175	$2,064	65.0%
2011 YE Projected	$3,175	$3,175	100.0%
2012	$2,386		

Goal - Installed kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	11,022	22,113	200.6%
2001	14,815	25,568	172.6%
2002	12,540	18,731	149.4%
2003	16,908	10,994	65.0%
2004	20,579	22,420	108.9%
2005	24,837	20,122	81.0%
2006	13,628	13,765	101.0%
2007	10,830	15,090	139.3%
2008	11,151	14,302	128.3%
2009	16,512	16,308	98.8%
2010	8,147	11,255	138.1%
2011	9,526		
2011 YTD (Jun)	9,526	649	6.8%
2011 YE Projected	9,526	9,526	100.0%
2012	6,738		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	4,327	3,815	88.2%
2004	5,891	4,180	71.0%
2005	7,102	4,367	61.5%
2006	2,745	4,685	170.7%
2007	2,008	2,622	130.6%
2008	1,975	2,337	118.3%
2009	2,424	2,620	108.1%
2010	988	1,329	134.5%
2011	1,335		
2011 YTD (Jun)	1,335	198	14.8%
2011 YE Projected	1,335	1,335	100.0%
2012	1,093		

Goal - Lifetime kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	165,338	331,701	200.6%
2001	222,225	383,520	172.6%
2002	188,100	280,965	149.4%
2003	253,620	164,910	65.0%
2004	308,699	336,293	108.9%
2005	424,067	343,568	81.0%
2006	217,936	191,708	88.0%
2007	173,054	224,566	129.8%
2008	179,779	203,135	113.0%
2009	248,326	268,292	108.0%
2010	128,227	177,958	138.8%
2011	154,180		
2011 YTD (Jun)	154,180	10,985	7.1%
2011 YE Projected	154,180	154,180	100.0%
2012	103,249		

Program Ratios

	$/kWh		$/LT kWh		$/kW	
	Target	Actual	Target	Actual	Target	Actual
2000	$0.255	$0.125	$0.017	$0.008	$0	$0
2001	$0.156	$0.090	$0.010	$0.006	$0	$0
2002	$0.166	$0.108	$0.011	$0.007	$0	$0
2003	$0.141	$0.180	$0.009	$0.012	$552	$518
2004	$0.114	$0.090	$0.008	$0.006	$398	$484
2005	$0.163	$0.188	$0.010	$0.011	$570	$863
2006	$0.233	$0.231	$0.015	$0.017	$1,155	$677
2007	$0.236	$0.335	$0.015	$0.022	$1,455	$1,926
2008	$0.236	$0.239	$0.015	$0.017	$1,330	$1,464
2009	$0.294	$0.266	$0.020	$0.016	$2,003	$1,655
2010	$0.633	$0.468	$0.040	$0.030	$5,219	$3,965
2011	$0.333		$0.021		$2,378	
2011 YTD (Jun)	$0.333	$3.180	$0.021	$0.188	$2,378	10,424
2011 YE Projected	$0.333	$0.333	$0.021	$0.021	$2,378	$2,378
2012	$0.354		$0.023		$2,183	

Notes
1. Energy Blueprint includes Motors and Cool Choice for 2003 - 2011
2. Energy Blueprint includes Municipal new construction and equipment replacement in 2005 - 2011

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - Energy Conscious Blueprint

Budget/(FTE):

1) Budget includes 4.34 FTEs for staffing
2) 2012 proposed overall budget is 25% decrease compared to the '11 revised budget
3) 2012 incentive structures are basically unchanged; program emphasis will transition to whole building performance
4) 2012 custom incentives include transparent re-structured measure caps focusing on cost containment;

Goal:

1) 2012 target = 72 projects
2) 2012 target of 6,673,593 kWh; a decrease of approx. 30%
3) 2012 target of 1,093 kW; a decrease of approx. 20%
4) 2012 planning model is based on historical data, program rule changes, baseline changes, and study information
5) ECB continues to be negatively impacted by a variety of issues
    a. adoption of new codes & standards; more stringent baselines; an apparent lack of enforcement for the new code
    b. economic recession continues to inhibit new construction
6) capturing more "lost opportunities" by greater focus on:
    a. mid-market customers (200-300kW)
    b. more whole building performance and HE equipment
    c. process equipment and optimization
    d. more outreach, training and education
7) adopted CL&P gross realization rates to simulate statewide realization rates
8) net realization rates capped at 100%

Cost/kWh (Cost/Unit):

1) 2012 projected cost rates are slightly increased compared to 2011: annual = $0.354/ kWh, lifetime = $.023 / kWh
2) 2012 projected $$/kW = $2,183 a slight decrease from 2011
3) higher program costs are anticipated due to continued effects of:
    a. economic recession; negative impacts on the construction market
    b. adoption of new codes & standards; more stringent baselines (less kWh)
    c. custom incentives for HE alternatives & whole building performance
    d. more outreach, training and education
4) ECB will continue to experience greater negative kWh and kW impacts due to:
    a. economic recession; negative impacts on the construction market
    b. adoption of new codes & standards; more stringent baselines (less kWh)
    c. measure life changes per recent studies

Metric Changes:

1) all savings are reported as net values

Municipal Lost Opportunity Projects (1,2,3)

Year	Inst. Proj.	kWh savings	kW savings	Incentive	$$/ kWh	$$/pk kW
2006	19	3,509,369	888.0	571600	$ 0.163	$ 644
2007	7	1,153,974	120.0	254011	$ 0.220	$ 2,117
2008	30	3,514,099	683.0	873297	$ 0.249	$ 1,279
2009	26	5,457,290	1192.0	1567208	$ 0.287	$ 1,315
2010	8	1,946,199	341.6	324859	$ 0.167	$ 951
2011 (Jun)	*7*	*865,809*	*240.2*	*240811*	*$ 0.278*	*$ 1,003*

(1) kWh and kW savings are net savings

(2) 2011 installed projects are based on installed and signed projects as of 06/30/11

(3) 2011 installed projects include xx gas projects

YGS Standard Filing Requirement

Energy Conscious Blueprint

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 60,129	$ 99,846	$ 102,649	$ 212,800	$ 67,099	$ 134,199	$ 212,800	
Outside Service	n/a	n/a	$ 42,888	$ 23,331	$ 31,321	$ 81,764	$ 4,592	$ 9,183	$ 138,232	
Materials & Supplies	n/a	n/a	$ 67	$ -	$ -	$ 494	$ -	$ -	$ 1,681	
Incentives	n/a	n/a	$ 277,680	$ 674,014	$ 852,468	$ 1,172,020	$ 896,568	$ 1,320,188	$ 1,090,672	
Marketing	n/a	n/a	$ 3,650	$ 1,569	$ 7,094	$ 4,810	$ 2,614	$ 5,229	$ 16,783	
Administrative Expense	n/a	n/a	$ 5,914	$ 5,746	$ 7,986	$ 8,112	$ 1,680	$ 3,360	$ 19,832	
Total			$ 390,328	$ 804,506	$ 1,001,518	$ 1,480,000	$ 972,553	$ 1,472,159	$ 1,480,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	43,558	112,046	287,670	197,858	86,436	130,839	280,342	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	670,160	1,770,613	4,371,511	3,032,051	1,437,354	2,175,731	4,246,241	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 8.96	$ 7.18	$ 3.48	$ 7.48	$ 11.25	$ 11.25	$ 5.28	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.58	$ 0.45	$ 0.23	$ 0.49	$ 0.68	$ 0.68	$ 0.35	e=a/c
Total Gas Benefit	n/a	n/a	$ 534,945	$1,413,366	$3,909,090	$ 2,374,940	$ 1,125,848	$ 1,704,203	$ 2,229,142	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 1.37	$ 1.76	$ 3.90	$ 1.60	$ 1.16	$ 1.16	$ 1.51	g=f/a
Customers Served	n/a	n/a	14	30	64	52	15	23	73	h
Lifetime Savings per Customer (ccf)	n/a	n/a	47,869	59,020	68,305	58,309	95,824	95,824	58,397	i=c/h
Program Cost per Customer	n/a	n/a	$ 27,881	$ 26,817	$ 15,649	$ 28,462	$ 64,837	$ 64,837	$ 20,354	k=a/h
Benefit per Customer	n/a	n/a	$ 38,210	$ 47,112	$ 61,080	$ 45,672	$ 75,057	$ 75,057	$ 30,657	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 292,668	$ 390,328	133%
2009	$ 1,300,000	$ 804,505	62%
2010	$ 1,420,000	$ 1,001,518	71%
2011 YTD (June)	$ 1,480,000	$ 972,553	66%
2011 YE projection	$ 1,480,000	$ 1,472,159	99%
2012	$ 1,480,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	14	-
2009	31	30	97%
2010	77	64	83%
2011 YTD (June)	52	15	29%
2011 YE projection	52	23	44%
2012	73	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	43,558	-
2009	97,628	112,046	115%
2010	189,646	287,670	152%
2011 YTD (June)	197,858	86,436	44%
2011 YE projection	197,858	130,839	66%
2012	280,342	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	670,160	-
2009	1,464,420	1,770,613	121%
2010	3,012,116	4,371,511	145%
2011 YTD (June)	3,032,051	1,437,354	47%
2011 YE projection	3,032,051	2,175,731	72%
2012	4,246,241	n/a	-

CNG Standard Filing Requirement

Energy Conscious Blueprint

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 42,149	$ 69,173	$ 80,732	$ 150,290	$ 42,195	$ 147,795	$ 150,290	
Outside Service	n/a	n/a	$ 33,480	$ 15,629	$ 18,193	$ 107,507	$ 5,486	$ 5,486	$ 107,507	
Materials & Supplies	n/a	n/a			$ -	$ 3,150	$ -	$ 107,508	$ 3,150	
Incentives	n/a	n/a	$ 162,181	$ 484,854	$ 621,552	$ 870,323	$ 130,273	$ 870,325	$ 970,323	
Marketing	n/a	n/a	$ 2,952	$ 831	$ 4,012	$ 3,060	$ 114	$ 3,060	$ 3,060	
Administrative Expense	n/a	n/a	$ 1,144	$ 1,938	$ 2,810	$ 5,670	$ 725	$ 5,669	$ 5,670	
Total			$ 241,906	$ 572,425	$ 727,299	$ 1,140,000	$ 178,793	$ 1,139,843	$ 1,240,000	a

Energy Savings Information	2007 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	24,169	88,706	106,425	146,926	28,459	181,432	249,408	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	361,044	1,350,926	1,578,228	2,251,551	475,100	3,028,862	3,777,694	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 10.01	$ 6.45	$ 6.83	$ 7.76	$ 6.28	$ 6.28	$ 4.97	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.67	$ 0.42	$ 0.46	$ 0.51	$ 0.38	$ 0.38	$ 0.33	e=a/c
Total Gas Benefit	n/a	n/a	$ 288,198	$1,078,357	$1,411,283	$1,763,591	$ 372,136	$ 2,372,442	$ 1,985,291	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 1.19	$ 1.88	$ 1.94	$ 1.55	$ 2.08	$ 2.08	$ 1.60	g=f/a
Customers Served	n/a	n/a	9	26	33	39	16	102	65	h
Lifetime Savings per Customer (ccf)	n/a	n/a	40,116	51,959	47,825	57,732	29,694	29,694	58,397	i=c/h
Program Cost per Customer	n/a	n/a	$ 26,878	$ 22,016	$ 22,039	$ 29,231	$ 11,175	$ 11,175	$ 19,168	k=a/h
Benefit per Customer	n/a	n/a	$ 32,022	$ 41,475	$ 42,766	$ 45,220	$ 23,258	$ 23,258	$ 30,689	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 200,584	$ 241,906	121%
2009	$ 700,000	$ 572,425	82%
2010	$ 858,726	$ 727,299	85%
2011 YTD (June)	$1,140,000	$ 178,793	16%
2011 YE projection	$1,140,000	$ 1,139,843	100%
2012	$ 1,240,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	9	-
2009	27	26	96%
2010	48	33	69%
2011 YTD (June)	39	16	41%
2011 YE projection	39	102	262%
2012	65	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	24,169	-
2009	86,402	88,706	103%
2010	146,926	106,425	72%
2011 YTD (June)	146,926	28,459	19%
2011 YE projection	146,926	181,432	123%
2012	249,408	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	361,044	-
2009	1,296,024	1,350,926	104%
2010	1,874,444	1,578,228	84%
2011 YTD (June)	2,251,551	475,100	21%
2011 YE projection	2,251,551	3,028,862	135%
2012	3,777,694	n/a	-

Energy Conscious Blueprint

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 5,462	$ 30,918	$ 11,385	$ 150,290	$ 5,498	$ 150,290	$ 145,290	
Outside Service	n/a	n/a	$ 1,210	$ 149	$ 4,501	$ 122,444	$ 60	$ 122,444	$ 106,844	
Materials & Supplies	n/a	n/a	$ -	$ -	$ -	$ 324	$ -	$ 324	$ 324	
Incentives	n/a	n/a	$ 647,077	$ 571,679	$ 604,050	$ 767,951	$ 462,520	$ 767,951	$ 887,651	
Marketing	n/a	n/a	$ 2,952	$ 1,144	$ 1,865	$ 3,213	$ 225	$ 3,213	$ 3,213	
Administrative Expense	n/a	n/a	$ 142	$ 1,849	$ 1,737	$ 5,778	$ 244	$ 5,778	$ 6,678	
Total			$ 656,843	$ 605,739	$ 623,538	$ 1,050,000	$ 468,547	$ 1,050,000	$ 1,150,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	127,002	132,675	232,842	129,644	5,919	13,264	228,158	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	1,907,123	2,008,951	3,152,235	1,986,711	95,192	213,322	3,455,834	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 5.17	$ 4.57	$ 2.68	$ 8.10	$ 79.16	$ 79.16	$ 5.04	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.34	$ 0.30	$ 0.20	$ 0.53	$ 4.92	$ 4.92	$ 0.33	e=a/c
Total Gas Benefit	n/a	n/a	$ 1,522,333	$ 1,603,616	$ 2,818,790	$ 1,556,148	$ 74,562	$ 167,091	$ 1,816,144	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 2.32	$ 2.65	$ 4.52	$ 1.48	$ 0.16	$ 0.16	$ 1.58	g=f/a
Customers Served	n/a	n/a	12	28	45	34	5	11	59	h
Lifetime Savings per Customer (ccf)	n/a	n/a	158,927	71,748	70,050	58,433	19,038	19,038	58,397	i=c/h
Program Cost per Customer	n/a	n/a	$ 54,737	$ 21,634	$ 13,856	$ 30,882	$ 93,709	$ 93,709	$ 19,433	k=a/h
Benefit per Customer	n/a	n/a	$ 126,861	$ 57,272	$ 62,640	$ 45,769	$ 14,912	$ 14,912	$ 30,689	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 174,509	$ 656,843	376%
2009	$ 1,050,000	$ 605,739	58%
2010	$ 859,585	$ 623,538	73%
2011 YTD (June)	$ 1,050,000	$ 468,547	45%
2011 YE projection	$ 1,050,000	$ 1,050,000	100%
2012	$ 1,150,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	12	-
2009	27	28	104%
2010	48	45	94%
2011 YTD (June)	34	5	15%
2011 YE projection	34	11	33%
2012	59	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	127,002	-
2009	86,402	132,675	154%
2010	118,166	232,842	197%
2011 YTD (June)	129,644	5,919	5%
2011 YE projection	129,644	13,264	10%
2012	228,158	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	1,907,123	-
2009	1,296,024	2,008,951	155%
2010	1,876,804	3,152,235	168%
2011 YTD (June)	1,986,711	95,192	5%
2011 YE projection	1,986,711	213,322	11%
2012	3,455,834	n/a	-

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C&I RETROFIT

Energy Opportunities: (Electric and Natural Gas)

Objective:

The Energy Opportunities ("EO") program encourages customers and their contractors or Energy Service Companies (ESCOs) to save energy in existing commercial, industrial, and municipal facilities by offering incentives, financing and other resources to replace existing, inefficient equipment with energy-saving options. EO offers many options within the program to best address customer issues. EO encourages a "holistic," comprehensive approach to improve overall building performance to encourage multiple measure, multiple end-use projects where practical.

Target Market:

The EO program commercial, industrial, state, municipal, and institutional customers whose annual average peak demand is 200 kW or greater and who can benefit from both electric and/or natural gas retrofit projects in their facilities. Natural gas customers need to be on a firm gas rate to receive gas measure incentives. Customers utilizing fossil fuels other than natural gas would only be eligible for electric incentives.

Owners and managers of multi-family residential buildings may also participate in the EO program representing a target market that often straddles the eligibility requirements of both C&I and residential program offerings. This customer sector also has opportunities for whole-building-integrated retrofits.

If market or program needs dictate, the EO program also has the flexibility to target customer segments, as well as contractors and ESCOs, with unique characteristics and needs not covered by other program offerings.

Program Description:

As mentioned previously, EO provides many solutions to help customers address energy efficiency in existing facilities. While customers are the ultimate beneficiary of the energy savings, it is important to note that the program is primarily deployed through a robust collaboration with contractors and ESCOs.

In most EO projects a customer voluntarily exchanges or modifies inefficient but functioning equipment with a high-efficiency alternative, resulting in energy savings and improved energy efficiency within a facility. Any such new high-efficiency equipment must meet or exceed efficiency standards where applicable.

The services provided through EO are varied and specifically designed to meet the needs of the individual customer. Working with contractors and ESCOs, the program assists customers with

measure identification, basic rebate programs for more common measures, complete incentive and financing solutions for comprehensive projects, Quality Assurance (QA) of energy savings calculations and analysis, and verification of installed equipment efficiency. Both electric and natural gas saving measures are evaluated in EO. In addition, the Companies may elect to provide a co-funded study to determine the cost effectiveness of a measure or to qualify an emerging technology.

The same programmatic rules apply to state or municipal customers as to other commercial customers. It should be noted that since there are no specific goals for state or municipal projects, the savings are included in the EO goals and cost rates.

Marketing Strategy:

The EO program relies primarily on marketing and direct interaction with contractors, engineers, ESCOs as well as repeat customer participation word-of-mouth to minimize marketing expenses. The EDCS and LDCs may augment enrollment with:

- paid advertising (radio, print and electronic) in broadcast outlets and local and regional business publications targeting building owners, business owners, facility managers and energy managers;
- paid advertising (print and electronic) in local and regional contractor trade journals targeting contractors;
- targeted mailings and e-mail communications of program literature to contractors utilizing association lists, and
- booth presence at strategically selected trade shows.

Where appropriate, the advertising will direct audiences to the Electric and Natural Gas Companies' web sites, the Connecticut's Energy Information web site (CTEnergyInfo.com) and Connecticut's statewide toll-free energy information line (1-877-WISE-USE).

In addition to program-specific promotion, marketing efforts will also include actions intended to support C&I customers and the contractor community, and to further the cause of market transformation. This support may take the form of:

- writing and distributing case studies (also referred to as Success Stories[14] or Testimonials) through various marketing channels;
- promoting Fund-sponsored technical training seminars via e-mail and newsletters;
- hosting contractor meetings, and

[14] A CL&P example of this would be http://nuwnotes1.nu.com/apps/clp/clpwebcontent.nsf/AR/MeridenPropertyManagement/$File/MeridenPropertyManagement.pdf

- participation in associations through memberships and events.

Incentive Strategy:

In 2012, the joint EO program will continue to make use of the most successful retrofit strategies for meeting the needs of the Companies' (EDCs and LDCs) diverse customer base, including a more comprehensive approach to improving the overall performance of facilities. Over the years, flexibility has proven to be vital for implementing cost-effective, energy-efficient projects in both service territories.

As a result of last year's final decision (Docket #10-10-03) the DPUC approved the EDCs plan to simplify program incentive caps and improve transparency. This approval allowed the Companies to utilize published unit incentive cost rate caps. This successful strategy, launched in January 2011, will continue to provide program incentive transparency while continuing to allow for greater flexibility and better project incentive costs management. This strategy will also be continued for the gas program incentive structures as well. Please refer to the incentive tables located in the appendix at the back of Chapter 3.

The EDCs may also employ maximum incentive caps per Federal Tax ID, per customer account, or per project basis, when necessary to ensure Energy Efficiency Fund dollars are available to a greater number of customers and budgets are appropriately managed.

The Companies continue to review all incentive levels to ensure that they are consistent with current and expected market conditions, customer investment options and approved budgets. In addition, the Companies will continue to evaluate market trends and responsiveness, and make adjustments to participation requirements and incentive levels accordingly.

The Companies will continue to offer prescriptive rebates[15] where applicable for smaller and more typical projects. These rebates are intended to pay prescribed dollar amounts for replacing standard efficiency equipment with high-efficiency alternatives. The rebate process is expedited via a simple form filled out by customers or their contractors.

Custom incentives will continue to be offered by the EO program. These incentives will be applicable to a wide, diverse range of energy-saving technologies. Qualifying projects or Energy Conservation Measures ("ECMs") earn incentives that represent a percentage of the project costs up to a maximum dollar value based on the kWh and peak kW savings. The percentage and value per kWh and kW saved are set to influence implementation and may vary from year to year. The incentive calculations are based on the following: (a) energy savings (kWh) and peak demand savings (kW); (b) project or ECM cost; (c) the simple payback for ECM; and (d) the measure life.

[15] This CL&P web page link allows customers to gain quick access to all electric and gas rebates currently offered: http://www.cl-p.com/Business/SaveEnergy/BusinessRebates.aspx

Goals:

Refer to Standard Filing Requirements for program goals.

New Program Issues:

Over the years Energy Efficiency Fund programming and funding has conformed to the single "calendar" year design and has demonstrated that it is not "in sync" with the fiscal year design of many customers. It is the Companies opinion that a multi-year plan for both budget and programming would greatly facilitate the adoption of performance contracting.

In 2012, the Companies will continue to facilitate the implementation of Performance Contracting as a viable means of implementation and financing, as described in Chapter 3, Overview. The Companies will also be facilitating more comprehensive projects which, in turn, will generate "broader and deeper" opportunities for optimizing the various energy consuming systems within a facility.

The 2012 Plan includes new financing options for EO program participants which are detailed in Chapter 5.

The Natural Gas Companies will continue to submit natural gas projects with incentives in excess of $100,000 to the Authority for incremental budget approval. This practice has been in effect since March 2010, as a result of Order #4 of Docket No. 08-10-02, in an effort to minimize negative impacts on the gas budgets from just a few very large dollar incentive projects.

CL&P Specific Issues:

UI Specific Issues:

Comprehensive incentives are very powerful tools for achieving savings, but due to their higher levels of cost, place a heavier burden on the program budget. In 2011, customer demand has continued to cause budgetary constraints despite the restructured lower incentive.

CL&P Standard Filing Requirement

Energy Opportunities

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 1,209	$ 1,428	$ 1,813	$ 641	$ 1,802	$ 1,509		$ 1,509
Contractor Staff	$ 154	$ 435	$ 693	$ 284	$ 689	$ 503		$ 503
Total Labor	$ 1,362	$ 1,863	$ 2,506	$ 926	$ 2,491	$ 2,012		$ 2,012
Materials & Supplies	$ 4	$ 4	$ 23	$ 8	$ 23	$ 20		$ 20
Outside Services	$ 137	$ 344	$ 694	$ 80	$ 689	$ 377	a)	$ 375
Incentives	$ 8,580	$ 15,221	$ 22,223	$ 17,038	$ 22,082	$ 10,563		$ 10,494
Marketing	$ 23	$ 149	$ 305	$ 31	$ 303	$ 160	b)	$ 159
Administrative Expenses	$ 75	$ 60	$ 135	$ 28	$ 134	$ 80	c)	$ 79
Other	$ 50	$ 26	$ 50	$ 24	$ 50	$ 30		$ 30
Total	$ 10,231	$ 17,667	$ 25,936	$ 18,134	$ 25,772	$ 13,242		$ 13,169

a) Includes consultant fees for focused studies, system modeling and QA/QC.

b) Includes marketing to customers, trade allies and engineering firms through general awareness campaigns, print advertisements, leave-behind brochures and trade shows.

c) Employee expenses including mileage, training, conference attendance and misc.

2012 Goals and Metrics Information

	Program Total	Municipal
Demand Savings (kW Reduction Goal)	6,027	422
Annual Energy Savings (kWh Reduction Goal)	42,198,861	2,957,437
Lifetime Energy Savings (kWh Reduction Goal)	521,131,463	36,522,638
Annual Cost Rate ($/kWh)	$ 0.314	$ 0.314
Lifetime Cost Rate ($/kWh)	$ 0.025	$ 0.025
Electric b/c Ratio	3.42	3.42
Total Resource b/c Ratio	1.92	1.92

CL&P Standard Filing Requirement

Energy Opportunities

Program Costs

Year	Budget	Actual	% of Budget	$/LT-kWh
2006 Revised	$ 8,085,177	$ 9,081,115	112%	0.005
2007 Revised	$ 10,009,000	$ 22,928,130	229%	0.016
2008 Revised	$ 31,695,999	$ 29,565,748	93%	0.024
2009 Revised	$ 11,724,000	$ 10,231,492	87%	0.017
2010 Revised	$ 17,666,726	$ 17,863,695	101%	0.023
2011 Revised	$ 25,936,175	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 18,134,254	70%	0.073
2011 Y/E Projected	25,936,175	$ 25,771,588	99%	0.027
2012	$ 13,241,950	n/a	n/a	n/a

Goal - Participation

Year	Goal	Actual	% of Goal
2006 Revised	686	559	81%
2007 Revised	854	637	93%
2008 Revised	1,464	577	84%
2009 Revised	400	670	167%
2010 Revised	483	884	183%
2011 Revised	1,282	n/a	n/a
2011 YTD (Jun)	n/a	367	29%
2011 Y/E Projected	1,282	734	57%
2012	590	n/a	n/a

Goal - Lifetime MWh Savings

Year	Budget	Actual	% of Budget
2006 Revised	1,060,246	1,664,677	157%
2007 Revised	677,071	1,466,673	217%
2008 Revised	1,248,140	1,227,472	98%
2009 Revised	1,054,932	587,158	56%
2010 Revised	1,011,392	769,087	76%
2011 Revised	1,031,073	n/a	n/a
2011 YTD (Jun)	n/a	247,865	24%
2011 Y/E Projected	1,031,073	958,188	93%
2012	521,131	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2006 Revised	9,277	15,295	165%
2007 Revised	7,659	17,675	231%
2008 Revised	16,892	14,859	88%
2009 Revised	10,486	6,017	57%
2010 Revised	13,030	8,693	67%
2011 Revised	11,045	n/a	n/a
2011 YTD (Jun)	n/a	2,952	27%
1 Y/E Projected	11,045	10,561	96%
2012	6,027	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2006 Revised	0.008	0.005	872	594
2007 Revised	0.015	0.016	1,307	1,297
2008 Revised	0.025	0.024	1,876	1,990
2009 Revised	0.011	0.017	1,118	1,700
2010 Revised	0.017	0.023	1,356	2,055
2011 Revised	0.025	n/a	2,348	n/a
2011 YTD (Jun)	n/a	0.073	n/a	6,143
2011 Y/E Projected	n/a	0.027	n/a	2,440
2012	0.025	n/a	2,197	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Energy Opportunities

Budget/FTE

11.2 FTEs for Program Administration, Inspections, etc.

Goal

Demand Savings (kW Reduction Goal)	6,027
Lifetime Energy Savings (kWh Reduction Goa	521,131,463

Cost/kWh (Cost/Unit)

$/Annualized kW	$	2,197
$/Lifetime kWh	$	0.025

Goal Setting Methodology

The 2012 planning model is based on 2010 actual results from similar projects and program rule changes.

Metric Changes

None

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Energy Opportunities (1, 2)

Baseline Assumptions:

Market: Retrofit program for C&I customers > 200 kW

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 509,744	$ 533,287	$ 250,287	$ 533,287	$ 538,015	a)	$ 564,916
Contractor Staff	$ -	$ 15,000	$ -	$ 15,000	$ 15,000	b)	$ 15,000
Total Labor	$ 509,744	$ 548,287	$ 250,287	$ 548,287	$ 553,015		$ 579,916
Materials & Supplies	$ 2,837	$ 3,100	$ 135	$ 3,100	$ 3,050	c)	$ 3,100
Outside Services	$ 123,977	$ 135,000	$ 8,901	$ 85,061	$ 102,500	d)	$ 100,000
Incentives	$ 4,566,104	$ 2,950,714	$ 3,000,153	$ 4,000,153	$ 2,160,084	e)	$ 2,118,875
Marketing	$ 47,774	$ 48,000	$ 19,893	$ 48,000	$ 33,000	f)	$ 32,000
Other	$ 3,313	$ 3,000	$ 3,500	$ 3,500	$ 3,000	g)	$ 3,000
Administrative Expenses	$ 106,870	$ 172,920	$ 83,371	$ 172,920	$ 152,670	h)	$ 152,000
Total	$ 5,360,620	$ 3,861,021	$ 3,366,240	$ 4,861,021	$ 3,007,319		$ 2,988,891

(1) EO includes the C&I Loan Program
(2) EO includes the Express Lighting Rebate

a) 4.29 FTEs
b) temporary contract services
c) no comment
d) Consultant / engineering / audit services
e) Customer incentives
f) Brochure revision, selected advertising, public relations, etc.
g) no comment
h) Financing interest, employee training, mileage, etc.

Goals and Metrics Information:

Savings	2012
Demand Savings (kW)	1,172
Annual Energy Savings (kWh)	8,992,818
Lifetime Energy Savings (kWh)	113,819,163
Annual Cost Rate ($/kWh)	$ 0.334
Lifetime Cost Rate ($/kWh)	$ 0.026
Cost per kW	$ 2,565
Electric System B/C Ratio	3.22
Total Resource B/C Ratio	1.57

The United Illuminating Company
LF-26 Standard Filing Requirement

Energy Opportunities (1)

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$2,559	$3,006	117.5%
2001	$5,165	$3,401	66.3%
2002	$2,350	$1,271	54.1%
2003	$2,315	$1,169	61.5%
2004	$2,207	$2,259	102.4%
2005	$2,800	$3,917	139.9%
2006	$2,050	$2,977	145.2%
2007	$1,932	$5,843	302.4%
2008	$3,172	$3,119	98.3%
2009	$5,611	$4,789	85.4%
2010	$4,014	$4,845	120.7%
2011	$3,861		
2011 YTD (Jun)	$3,861	$3,366	87.2%
2011 YE Projected	$3,861	$4,861	125.9%
2012	$3,007		

Goal - Installed kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	9,854	19,863	201.6%
2001	29,321	25,592	87.3%
2002	9,897	13,156	132.9%
2003	18,727	11,929	63.7%
2004	17,699	18,591	105.0%
2005	21,785	24,167	110.9%
2006	11,896	20,704	174.0%
2007	11,070	21,574	194.9%
2008	17,028	20,668	121.4%
2009	25,725	18,129	70.5%
2010	14,967	16,948	113.2%
2011	12,758		
2011 YTD (Jun)	12,758	3,542	27.8%
2011 YE Projected	12,758	16,105	126.2%
2012	8,993		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	3,960	2,191	55.3%
2004	4,443	3,180	71.6%
2005	4,966	3,850	77.5%
2006	2,191	3,345	152.7%
2007	1,759	3,993	227.0%
2008	2,661	3,530	132.7%
2009	3,840	2,977	77.5%
2010	2,013	2,302	114.4%
2011	2,057		
2011 YTD (Jun)	2,057	557	27.1%
2011 YE Projected	2,057	2,620	127.4%
2012	1,172		

Goal - Lifetime kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	147,813	280,874	190.0%
2001	433,695	383,196	88.4%
2002	146,823	190,038	129.4%
2003	280,905	178,935	63.7%
2004	265,488	278,872	105.0%
2005	368,721	409,048	110.9%
2006	183,442	310,557	169.3%
2007	140,313	291,700	207.9%
2008	221,498	272,595	123.1%
2009	345,264	233,761	67.7%
2010	186,728	209,052	112.0%
2011	159,471		
2011 YTD (Jun)	159,471	47,228	29.6%
2011 YE Projected	159,471	200,933	126.0%
2012	113,819		

Program Ratios

	$/kWh		$/LT kWh		$/kW	
Year	Target	Actual	Target	Actual	Target	Actual
2000	$0.260	$0.151	$0.017	$0.011	$0	$0
2001	$0.176	$0.134	$0.012	$0.009	$0	$0
2002	$0.237	$0.103	$0.016	$0.007	$0	$0
2003	$0.124	$0.119	$0.008	$0.008	$585	$534
2004	$0.125	$0.122	$0.008	$0.008	$497	$710
2005	$0.129	$0.162	$0.008	$0.010	$564	$1,017
2006	$0.172	$0.144	$0.011	$0.010	$936	$890
2007	$0.175	$0.271	$0.014	$0.020	$1,098	$1,463
2008	$0.186	$0.151	$0.014	$0.011	$1,192	$884
2009	$0.218	$0.264	$0.016	$0.020	$1,461	$1,609
2010	$0.268	$0.286	$0.021	$0.023	$1,994	$2,105
2011	$0.303		$0.024		$1,877	
2011 YTD (Jun)	$0.303	$0.950	$0.024	$0.071	$1,877	$6,044
2011 YE Projected	$0.303	$0.302	$0.024	$0.024	$1,877	$1,855
2012	$0.334		$0.026		$2,565	

Notes:
1. 2000-2002 data from LF-26 filed in 03-01-01
2. '03 data reflects budgets approved in 03-01-01
3. '04 data repesents the revised budget allocations
4. '02-'03 Energy Opportunities included RFP and O&M RFP numbers
5. '05-'06 EO budget & goal includes potential measures from Retro-Commissioning & other O&M RFP subprograms
6. Energy Opportunities includes Municipal retrofit projects in 2006 - 2008
7. accelerated chiller carryover projected at 1 projects, accounting for 10% of the expenditures and 3% of the kWh and kW savings
8. Starting in 2009 EO includes C&I Loan Program

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - Energy Opportunities

Budget/(FTE):

1) Budget includes 4.29 FTEs for staffing
2) 2012 proposed overall budget is a 24% decrease compared to the '11 revised budget
3) 2012 incentives include transparent re-structured measure caps focusing on cost containment;
4) 2012 incentives include a re-structured comprehensive initiative with incentives consistent with the 2011 structure
5) Project financing costs reduce available incentive funds
6) Customers > 200 kW will be eligible for EO
7) 2011 budget was revised after 9/16/11 approval for $1 M
8) Increased budget, kWh and kW goals are reflected in the 2011 projected actuals

Goal:

1) 2012 target = 80 installed projects
2) 2012 target of 8,992,818 kWh; a decrease of approx. 54%
3) 2012 target of 1,172 kW; a decrease of approx. 65%
4) 2012 planning model is based on historical data, programmatic rule changes, and evaluation information
5) Targets impacted by higher costs of comprehensive projects
6) Targets impacted by modified coincidence factors, realization rates, and measure life
7) net realization rates capped at 100%
8) capture more retrofit opportunities by greater focus on:
   a. non participants > 200 kW in size
   b. increased comprehensiveness per project
   c. process equipment and system optimization
   d. higher performance alternatives
   e. more outreach and training

Cost/kWh (Cost/Unit):

1) 2012 projected cost rates: annual = $0.334/ kWh, a 10% over the 2011 projected cost rate; lifetime = $.026/ kWh;
2) 2012 projected $$/kW = $2,565; increase of 36% over 2011 projected cost rate
3) program costs will remain elevated due to:
   a. increased costs to overcome a sluggish economy
   b. increased costs for emerging technologies
   c. increased costs from a continued comprehensive effort
   d. more outreach, training and education
4) EO will experience negative kW impacts due to:
   a. coincidence factors modified per recent studies
   b. net realization rates applied in accordance with recent studies
   c. measure life changes per recent studies
   d. exterior LED/ induction lights / EMS measures
   e. less kWh generated from older lighting

Metric Changes:

1) all savings are reported as net values

Municipal Retrofit Projects (1,2,3,4)

Year	Install Proj.	kWh savings	kW savings	Incentive	$$/ kWh	$$/pk kW
2006	51	4,508,755	1124	1,219,007	$ 0.270	$ 1,085
2007	44	3,393,721	714	773,662	$ 0.228	$ 1,084
2008	59	5,155,819	978	1,179,436	$ 0.229	$ 1,206
2009	62	5,150,641	975	1,208,149	$ 0.235	$ 1,239
2010	40	3,825,244	832	1,903,021	$ 0.497	$ 2,287
2011 (Jun)	*31*	*3,175,114*	*331*	*913,845*	*$ 0.288*	*$ 2,758*

(1) includes traffic signals installed in 2008

(2) kWh, kW savings, and cost rates are based on net savings

(3) 2011 installed projects are based on installed and signed projects as of 06/30/11

(4) 2011 installed projects include 7 gas projects

YGS Standard Filing Requirement

Energy Opportunities

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 23,618	$ 27,254	$ 52,521	$ 107,730	$ 29,670	$ 59,340	$ 107,730	
Outside Service	n/a	n/a	$ 17,551	$ 32,387	$ 6,225	$ 52,268	$ 3,822	$ 52,268	$ 95,268	
Materials & Supplies	n/a	n/a	$ 443	$ -	$ -	$ 360	$ -	$ -	$ 1,159	
Incentives	n/a	n/a	$ 3,934	$ 979,355	$ 414,789	$ 851,722	$ 351,448	$ 1,269,977	$ 790,608	
Marketing	n/a	n/a	$ 1,771	$ 2,796	$ 13,827	$ 3,060	$ 3,378	$ 6,755	$ 11,567	
Administrative Expense	n/a	n/a	$ 1,967	$ 3,494	$ 4,537	$ 4,860	$ 2,107	$ 4,214	$ 13,668	
Total			$ 49,283	$ 1,045,286	$ 491,899	$ 1,020,000	$ 390,425	$ 1,392,554	$ 1,020,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	17,218	639,931	205,653	548,792	59,333	211,627	348,479	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	191,374	9,216,030	2,347,874	7,765,169	630,874	2,250,179	4,008,441	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 2.86	$ 1.63	$ 2.39	$ 1.86	$ 6.58	$ 6.58	$ 2.93	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.26	$ 0.11	$ 0.21	$ 0.13	$ 0.62	$ 0.62	$ 0.25	e=a/c
Total Gas Benefit	n/a	n/a	$ 163,130	$ 7,855,892	$ 2,050,248	$ 6,112,362	$ 496,593	$ 1,771,231	$ 2,233,457	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 3.31	$ 7.52	$ 4.17	$ 5.99	$ 1.27	$ 1.27	$ 2.19	g=f/a
Customers Served	n/a	n/a	2	18	28	31	9	32	60	h
Lifetime Savings per Customer (ccf)	n/a	n/a	95,687	512,002	83,853	250,489	70,097	70,097	66,375	i=c/h
Program Cost per Customer	n/a	n/a	$ 24,642	$ 58,071	$ 17,568	$ 32,903	$ 43,381	$ 43,381	$ 16,890	k=a/h
Benefit per Customer	n/a	n/a	$ 81,565	$ 436,438	$ 73,223	$ 197,173	$ 55,177	$ 55,177	$ 36,983	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 539,535	$ 49,283	9%
2009	$ 890,000	$ 1,045,286	117%
2010	$ 890,000	$ 491,899	55%
2011 YTD (June)	$ 1,020,000	$ 390,425	38%
2011 YE projection	$ 1,020,000	$ 1,392,554	137%
2012	$ 1,020,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	2	-
2009	30	18	60%
2010	51	28	55%
2011 YTD (June)	31	9	29%
2011 YE projection	31	32	104%
2012	60	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	17,218	-
2009	158,038	639,931	405%
2010	435,940	205,653	47%
2011 YTD (June)	548,792	59,333	11%
2011 YE projection	548,792	211,627	39%
2012	348,479	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	191,374	-
2009	1,738,420	9,216,030	530%
2010	6,693,658	2,347,874	35%
2011 YTD (June)	7,765,169	630,874	8%
2011 YE projection	7,765,169	2,250,179	29%
2012	4,008,441	n/a	-

CNG Standard Filing Requirement

Energy Opportunities

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 6,918	$ 16,048	$ 29,058	$ 71,820	$ 9,301	$ 71,821	$ 103,180	
Outside Service	n/a	n/a	$ 8,867	$ 10,446	$ 8,020	$ 66,974	$ 1,184	$ 66,974	$ 51,194	
Materials & Supplies	n/a	n/a	$ -		$ -	$ 198	$ -	$ -	$ 198	
Incentives	n/a	n/a	$ 400	$ 113,156	$ 280,537	$ 613,028	$ 46,516	$ 613,030	$ 698,948	
Marketing	n/a	n/a	$ 795	$ 635	$ 6,896	$ 1,980	$ 441	$ 2,241	$ 1,980	
Administrative Expense	n/a	n/a	$ 151	$ 106	$ 484	$ 6,000	$ 44	$ 6,002	$ 4,500	
Total			$ 17,131	$ 140,392	$ 324,995	$ 760,000	$ 57,486	$ 760,068	$ 860,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goal	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	5,647	71,813	121,746	394,994	14,865	196,542	308,078	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	56,465	831,786	1,439,073	5,588,992	205,668	2,719,300	3,543,718	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 3.03	$ 1.95	$ 2.67	$ 1.92	$ 3.87	$ 3.87	$ 2.79	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.30	$ 0.17	$ 0.23	$ 0.14	$ 0.28	$ 0.28	$ 0.24	e=a/c
Total Gas Benefit	n/a	n/a	$ 48,132	$ 709,028	$ 1,256,650	$ 4,399,381	$ 161,892	$ 2,140,500	$ 1,976,132	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 2.81	$ 5.05	$ 3.87	$ 5.79	$ 2.82	$ 2.82	$ 2.30	g=f/a
Customers Served	n/a	n/a	2	12	23	22	4	53	53	h
Lifetime Savings per Customer (ccf)	n/a	n/a	28,233	69,316	62,568	254,045	51,417	51,417	66,375	i=c/h
Program Cost per Customer	n/a	n/a	$ 8,566	$ 11,699	$ 14,130	$ 34,545	$ 14,372	$ 14,372	$ 16,108	k=a/h
Benefit per Customer	n/a	n/a	$ 24,066	$ 59,086	$ 54,637	$ 199,972	$ 40,473	$ 40,473	$ 37,013	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	400,775	$ 17,131	4%
2009	$ 300,000	$ 140,392	47%
2010	$ 501,250	$ 324,995	65%
2011 YTD (June)	$ 760,000	$ 57,486	8%
2011 YE projection	$ 760,000	$ 760,068	100%
2012	$ 860,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	2	-
2009	17	12	71%
2010	27	23	85%
2011 YTD (June)	22	4	18%
2011 YE projection	22	53	240%
2012	53	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	5,647	-
2009	88,671	71,813	81%
2010	228,129	121,746	53%
2011 YTD (June)	394,994	14,865	4%
2011 YE projection	394,994	196,542	50%
2012	308,078	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	56,465	-
2009	975,385	831,786	85%
2010	3,502,815	1,439,073	41%
2011 YTD (June)	5,588,992	205,668	4%
2011 YE projection	5,588,992	2,719,300	49%
2012	3,543,718	n/a	-

SCG Standard Filing Requirement

Energy Opportunities

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 4,113	$ 4,141	$ 5,402	$ 71,820	$ 2,356	$ 71,820	$ 81,820	
Outside Service	n/a	n/a	$ 1,198	$ 1,236	$ 527	$ 84,583	$ -	$ 84,583	$ 63,783	
Materials & Supplies	n/a	n/a	$ -	$ -	$ -	$ 228	$ -	$ 228	$ 228	
Incentives	n/a	n/a	$ 54,060	$ 179,427	$ 72,281	$ 534,333	$ 293,814	$ 1,095,333	$ 645,133	
Marketing	n/a	n/a	$ 800	$ 526	$ 5,985	$ 2,256	$ 552	$ 2,256	$ 2,256	
Administrative Expense	n/a	n/a	$ 159	$ 44	$ 127	$ 6,780	$ 3	$ 6,780	$ 6,780	
Total			$ 60,330	$ 185,374	$ 84,322	$ 700,000	$ 296,725	$ 1,261,000	$ 800,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	13,025	30,977	37,364	344,288	7,534	32,017	284,358	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	195,375	629,418	398,807	4,871,525	113,010	480,262	3,270,872	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 4.63	$ 5.98	$ 2.26	$ 2.03	$ 39.38	$ 39.38	$ 2.81	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.31	$ 5.98	$ 2.26	$ 0.14	$ 2.63	$ 2.63	$ 0.24	e=a/c
Total Gas Benefit	n/a	n/a	$ 166,541	$ 536,526	$ 348,253	$ 3,834,626	$ 88,956	$ 378,038	$ 1,823,982	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 2.76	$ 2.89	$ 4.13	$ 5.48	$ 0.30	$ 0.30	$ 2.28	g=f/a
Customers Served	n/a	n/a	1	2	9	20	1	4	49	h
Lifetime Savings per Customer (ccf)	n/a	n/a	195,375	$ 4,917	$ 3,116	243,576	113,010	113,010	66,375	i=c/h
Program Cost per Customer	n/a	n/a	$ 60,330	$ 1,448	$ 659	$ 35,000	$ 296,725	$ 296,725	$ 16,234	k=a/h
Benefit per Customer	n/a	n/a	$ 166,541	$ 4,192	$ 2,721	$ 191,731	$ 88,956	$ 88,956	$ 37,013	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 361,197	$ 60,330	17%
2009	$ 300,000	$ 185,374	62%
2010	$ 443,750	$ 84,322	19%
2011 YTD (June)	$ 700,000	$ 296,725	42%
2011 YE projection	$ 700,000	$ 1,261,000	180%
2012	$ 800,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	1	-
2009	17	2	12%
2010	23	9	39%
2011 YTD (June)	20	1	5%
2011 YE projection	20	4	21%
2012	49	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	13,025	-
2009	88,671	30,977	35%
2010	195,604	37,364	19%
2011 YTD (June)	344,288	7,534	2%
2011 YE projection	344,288	32,017	9%
2012	284,358	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	195,375	-
2009	975,385	629,418	65%
2010	3,003,409	398,807	13%
2011 YTD (June)	4,871,525	113,010	2%
2011 YE projection	4,871,525	480,262	10%
2012	3,270,872	n/a	-

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Small Business Energy Advantage (Electric)

Objective:

The objective of the Small Business Energy Advantage ("SBEA") program is to provide cost-effective, turnkey C&LM services for small business customers.

Target Market:

All Commercial and Industrial (C&I) customers, including some multifamily complexes are eligible for the SBEA program. The program does restrict eligibility based on electric and gas criteria. Any electric customer with a 12-month peak demand average up to 200 kW is eligible for this program. In addition, the customer needs to be a firm gas customer to be eligible for the gas incentives. Customers utilizing fossil fuels other than natural gas would only be eligible for electric incentives.

Program Description:

The Companies, through a network of approved contractors, provide direct or turnkey services to maximize energy-efficiency operations for customers. These direct services include energy assessments and installation of measures.

As financial constraints are one of the primary barriers for this market, usually there are no up-front customer costs. The Electric Companies pay incentives for relevant energy- efficiency measures within cost-effectiveness constraints, and offer an interest-free financing option to credit-qualifying customers for the balance. The financed contract amount appears as a line item on the customer's electric bill. The loan repayment term, which is determined by the simple payback of the project, is set at a level which normally provides the customer with a positive annual cash flow based upon the estimated energy savings resulting from the installed measures. For 2012, the Companies will be creating an initial portfolio of gas measures and the ability to finance the project with on-bill repayment.

The SBEA program also includes an educational component to inform small business customers of the benefits that can be achieved through energy-efficiency efforts.

Marketing Strategy:

Many of the SBEA contractors have a dedicated sales force prospecting and cold-calling on potential leads. The Electric Companies provide these contractors with marketing collateral such as brochures, cut sheets, and success stories[16] to influence customer enrollment.

The Electric Companies may augment contractor enrollment with:

[16] An example of a case study from CL&P's website:
http://nuwnotes1.nu.com/apps/clp/clpwebcontent.nsf/AR/Marandino/$File/Marandino.pdf

- paid advertising (radio, print and electronic) in broadcast outlets, local business publications and Chamber of Commerce directories targeting business owners and directing readers to the Electric Companies' web sites and to CTEnergyInfo.com;
- direct mail campaigns to customers who have yet to participate, and;
- presence at strategically selected business expos and trade shows.

In addition to specific program promotion, marketing efforts will also include actions intended to support small business customers and the contractor community, and to facilitate market transformation. This support may take the form of:

- project leave-behinds summarizing what was done so employees at the location will understand the benefits of energy efficiency and can act as ambassadors of change outside of their work environment;
- writing and distributing success stories (See footnote below) to various marketing channels;
- direct mail;
- promotion of Fund-sponsored technical training seminars via e-mail and newsletters;
- hosting quarterly update and training meetings for the SBEA contractors, and;
- participation with Chambers of Commerce, town officials, trade groups and the Connecticut Department of Economic and Community Development through memberships, joint projects and events. Additionally, the Companies have or are exploring relationships with a variety of urban initiatives, such as, but not limited to, Empowerment New Haven, the Connecticut Retail Merchants Association (CRMA) and the Spanish American Merchants Association (SAMA) and Operation Fuel, ad channels to promote the SBEA program.

Incentive Strategy:

The Companies will continue its strategy of utilizing a mix of prescriptive and custom style incentives along with paying a modest increase to go after deeper, comprehensive measures. Incentives for lighting and other energy-efficiency measures are prescriptive and capped within cost-effectiveness constraints. Typically, incentives for non-lighting measures are custom-designed and capped within cost-effectiveness constraints of the measure. In addition to the mix of prescriptive and custom style incentives, interest free financing, as described in the C&LM Financing section, is offered with this program to qualified customers, as an additional incentive to facilitate participation.

As a result of last year's final decision (Docket #10-10-10), the PURA approved the EDCs plan to simplify program incentive caps and improve transparency. This approval allowed the Companies to utilize published unit incentive cost rate caps.[17] This successful strategy, launched in January 2011, will

[17] An example of CL&P's published incentive structure for retrofit programs is found here:

continue to provide program incentive transparency while continuing to allow for greater flexibility and better project incentive costs management. This strategy will also be continued for the gas program incentive structures as well. Please refer to the incentive tables located at the appendix at the back of Chapter 3.

The Companies will continue to evaluate market trends and responsiveness, and make adjustments to participation requirements and incentive levels accordingly.

Goals:

Refer to Standard Filing Requirements for program goals.

New Program Issues:

New for 2012, the Small Business Energy Advantage Program will incorporate an initial portfolio of the more common gas saving measures, operating with a specific, limited budget. This initial gas measure portfolio may include measures such as: high efficiency pre-rinse spray valves; food service equipment; low flow showerheads, faucet aerators; low flow salon-style spray heads; programmable thermostats; pipe insulation; duct sealing and duct insulation; indoor boiler reset controls; energy management systems; heating equipment; water heating equipment and envelope measures. The Companies will utilize a mix of prescriptive and custom style incentives and all the measures will be subject to the cost-effective program caps. The Companies have updated their SBEA software to accommodate these new gas measures.

New financing opportunities for SBEA gas measures are detailed in Chapter 5. In addition, alternative third-party financing for customers who do not meet the current eligibility requirements are also being offered in 2012; details can be found in Chapter 5.

The Electric Companies will be launching competitive bid processes in late 2011 for SBEA vendors for the 2012 and 2013 program years. A continued aspect of the process will be evaluating each vendor's ability to produce comprehensive projects.

CL&P Specific Issues

CL&P will launch a competitive bid process in 2011 to select SBEA contractors to provide services for the 2012 and 2013 program. It is expected that a total of 18 to 20 contractors will be selected and CL&P will continue to monitor contractor performance and make adjustments as necessary.

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http://nuwnotes1.nu.com/apps/clp/clpwebcontent.nsf/AR/RetrofitIncentives/$File/Retrofit_Incentives.pdf

UI Specific Issues:

For 2012, the Company plans on modifying its financing requirements for customers' eligibility. The planned modification will require customers seeking loan amounts greater than $45,000 and loan terms of 48 months to be verified through an external resource such as Dunn & Bradstreet. This plan will further protect the SBEA program and the fund from increased occurrences of delinquency.

UI has begun partnering with Gateway Community College to develop a training program that will lead to energy auditor certifications for the SBEA vendors similar to the Building Performance Institute certifications that are available to the HES vendors.

As previously noted, the Company will be working to implement "On-Bill Financing" in 2012. The customer billing systems for UI, SCG, and CNG are undergoing modifications so all three systems will be aligned and functioning the same way. Once this is completed (late 2013), the Companies will be able to offer "On-Bill Financing" to all eligible customers within their service territories.

Traditionally, the SBEA vendors gravitate toward customers with greater energy savings opportunities leaving the smallest customers as a drastically "underserved" portion of the SMB customer sector. Therefore by utilizing the partnerships previously mentioned, UI will be proposing to operate a "direct install" pilot to customers who have peak demands less than 10 kW. The primary target of this pilot will be the "struggling" urban businesses found throughout the various "economic development" or "empowerment" zones within UI's service territory.

As discussed previously, UI will conduct a joint competitive bid process in 2011 to select an appropriate number of SBEA contractors to providing services and achieving goals for the 2012 and 2013 program years. The contractors will be closely monitored for production, quality of field work, and overall customer service with adjustments being made as necessary. Increasing the number of inspections will have an overall positive affect on Vendor performance. In addition, UI will explore the possibility of enlisting the services of more "in territory" vendors so our customers can be better served.

CL&P Standard Filing Requirement

Small Business Energy Advantage

All dollar values are in $000
Customers with a 200kW demand or less or State Building projects.

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor								
NU Labor	$ 571	$ 603	$ 841	$ 330	$ 795	$ 683		$ 683
Contractor Staff	$ 71	$ 156	$ 200	$ 82	$ 189	$ 274		$ 274
Total Labor	$ 642	$ 759	$ 1,040	$ 412	$ 985	$ 957		$ 957
Materials & Supplies	$ 3	$ 2	$ 15	$ 1	$ 10	$ 10		$ 10
Outside Services	$ 29	$ 237	$ 319	$ 27	$ 302	$ 237	a)	$ 236
Incentives	$ 3,211	$ 9,815	$ 9,923	$ 5,660	$ 9,390	$ 8,619		$ 8,573
Marketing	$ 49	$ 87	$ 320	$ 56	$ 303	$ 300	b)	$ 298
Administrative Expenses	$ 931	$ 1,194	$ 1,800	$ 913	$ 1,703	$ 1,500	c) d)	$ 1,492
Other	$ 13	$ 8	$ 20	$ 15	$ 19	$ 17		$ 17
Total	$ 4,879	$ 12,101	$ 13,437	$ 7,084	$ 12,712	$ 11,640		$ 11,583

a) Technical analysis and third-party pre/post inspection service.

b) Market program to customers, trade allies and professional organizations.

c) Employee expenses including mileage, training, conference attendance and misc.

d) Primarily due to interest expense payments on the zero % customer loans.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	4,827.7
Annual Energy Savings (KWh Reduction Goal)	28,137,781
Lifetime Energy Savings (kWh Reduction Goal)	344,348,911
Annual Cost Rate ($/kWh)	$ 0.414
Lifetime Cost Rate ($/kWh)	$ 0.034
Electric b/c Ratio	2.56
Total Resource b/c Ratio	1.66

CL&P Standard Filing Requirement

Small Business Energy Advantage

Program Costs

Year	Budget	Actual	% of Budget	$/LT-kWh
2000	$ 1,525,000	$ 852,000	56%	0.011
2001	$ 2,720,000	$ 2,437,000	90%	0.013
2002	$ 3,449,000	$ 2,812,000	82%	0.015
2003	$ 3,800,000	$ 2,167,157	57%	0.010
2004	$ 3,000,000	$ 3,263,609	109%	0.010
2005 Revised	$ 3,456,476	$ 2,710,538	78%	0.012
2006 Revised	$ 4,300,000	$ 7,497,147	174%	0.013
2007 Revised	$ 3,900,200	$ 10,204,353	262%	0.022
2008 Revised	$ 13,537,620	$ 11,390,772	84%	0.025
2009 Revised	$ 9,808,000	$ 4,879,517	50%	0.018
2010 Revised	$ 10,890,000	$ 12,100,944	111%	0.032
2011 Revised	$ 13,437,460	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 7,083,730	53%	0.038
2011 Y/E Projected	$ 13,437,460	$ 12,711,807	95%	0.036
2012	$ 11,640,000	n/a	n/a	n/a

Goal - Participation

Year	Goal [2]	Actual	% of Goal
2000	924	587	64%
2001	1,860	2,023	109%
2002	2,114	1,961	93%
2003	769	505	66%
2004	561	603	107%
2005 Revised	522	523	100%
2006 Revised	489	955	195%
2007 Revised	514	1,397	272%
2008 Revised	1,647	1,138	69%
2009 Revised	1,197	785	66%
2010 Revised	1,107	1,546	140%
2011 Revised	1,404	n/a	n/a
2011 YTD (Jun)	n/a	790	56%
2011 Y/E Projected	1,404	1,580	113%
2012	1,440	n/a	n/a

Goal - Lifetime MWh Savings

Year	Goal (MWh)	Actual (MWh)	% of Goal
2000	107,466	75,624	70%
2001	197,383	189,039	96%
2002	181,333	192,412	106%
2003	261,691	221,042	84%
2004	217,790	328,965	151%
2005 Revised	202,766	233,266	115%
2006 Revised	284,749	561,280	197%
2007 Revised	198,363	468,516	236%
2008 Revised	606,652	457,376	75%
2009 Revised	554,086	275,112	50%
2010 Revised	372,522	376,215	101%
2011 Revised	493,393	n/a	n/a
2011 YTD (Jun)	n/a	185,868	38%
2011 Y/E Projected	493,393	349,472	71%
2012	344,349	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	n/a	n/a
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	3,224	2,430	75.4%
2004	2,552	3,354	131.4%
2005 Revised	2,376	2,349	98.9%
2006 Budget	2,916	8,497	291.4%
2007 Revised	3,022	9,310	308.1%
2008 Revised	10,647	8,287	77.8%
2009 Revised	10,698	4,987	46.6%
2010 Revised	5,402	5,244	97.1%
2010 Revised	6,521	n/a	n/a
2011 YTD (Jun)	n/a	2,414	37.0%
)11 Y/E Projected	6,521	5,654	86.7%
2012	4,828	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.014	0.011	n/a	1,004
2001	0.014	0.013	n/a	1,066
2002	0.019	0.015	n/a	1,196
2003	0.017	0.010	1,270	892
2004	0.014	0.010	1,175	973
2005 Revised	0.017	0.012	1,455	1,154
2006 Revised	0.015	0.013	1,475	882
2007 Revised	0.020	0.022	1,291	1,096
2008 Revised	0.014	0.025	1,271	1,374
2009 Revised	0.018	0.018	917	978
2010 Revised	0.029	0.032	2,016	2,308
2011 Revised	0.027	n/a	2,061	n/a
2011 YTD (Jun)	n/a	0.038	n/a	2,934
2011 Y/E Projected	n/a	0.036	2,061	2,248
2012	0.034	n/a	2,411	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Small Business Energy Advantage

Budget / (FTE)

5.1	FTEs for Program administration, inspections, QA/QC, loan collections, etc.

Goal

1440	Customers - installed projects.
4,828	Demand Savings (kW Reduction Goal)
344,348,911	Lifetime Energy Savings (kWh Reduction Goal)

Cost/kWh (Cost/Unit)

$/Annualized kW	$	2,411
$/Lifetime kWh	$	0.034

Goal Setting Methodology

The 2012 planning model is based on 2010 actual results.
Changes were made to incorporate different incentive structure and coincidence factors.

Metric Changes:

None

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Small Business

Baseline Assumptions:

Market — Retrofit program for small C&I customers < 200 kW [1]

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 250,899	$ 257,077	$ 116,716	$ 257,077	$ 262,536	a)	$ 275,663
Contractor Staff	$ -	$ 10,500	$ -	$ 10,500	$ 10,500	b)	$ 10,500
Total Labor	$ 250,899	$ 267,577	$ 116,716	$ 267,577	$ 273,036		$ 286,163
Materials & Supplies	$ 85	$ 3,266	$ 29	$ 3,266	$ 3,266	c)	$ 3,266
Outside Services	$ 121,868	$ 30,000	$ 10,330	$ 30,000	$ 50,000	d)	$ 50,000
Incentives	$ 2,232,614	$ 2,040,261	$ 444,388	$ 2,040,261	$ 1,559,934	e)	$ 1,532,925
Marketing	$ 27,057	$ 24,000	$ 1,784	$ 24,000	$ 30,000	f)	$ 30,000
Other	$ 1,771	$ 1,200	$ 542	$ 1,200	$ 1,100	g)	$ 1,100
Administrative Expenses	$ 338,511	$ 351,330	$ 163,303	$ 351,330	$ 310,300	h)	$ 310,300
Total	$ 2,972,805	$ 2,717,634	$ 737,092	$ 2,717,634	$ 2,227,636		$ 2,213,754

(1) Customer eligibility is up to 200 kW

a) 2.05 FTEs
b) no comment
c) no comment
d) Consultant / engineering / audit services
e) Customer incentives
f) Brochure revision, selected advertising, public relations, etc.
g) no comment
h) Financing interest, employee training, mileage, etc.

Goals and Metrics Information:

Savings

	2012
Demand Savings (kW)	861
Annual Energy Savings (kWh)	5,074,638
Lifetime Energy Savings (kWh)	64,551,988
Annual Cost Rate ($/kWh)	$ 0.439
Lifetime Cost Rate ($/kWh)	$ 0.035
Cost per kW	$ 2,587
Electric System B/C Ratio	2.56
Total Resource B/C Ratio	1.15

The United Illuminating Company
LF-26 Standard Filing Requirement

Small Business Energy Advantage

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$1,514	$1,203	79.5%
2001	$1,327	$1,397	120.2%
2002	$1,065	$997	93.6%
2003	$1,301	$846	65.0%
2004	$922	$844	91.5%
2005	$1,350	$1,386	102.7%
2006	$1,530	$1,638	107.1%
2007	$1,411	$1,842	130.5%
2008	$2,011	$2,145	106.7%
2009	$3,623	$2,170	59.9%
2010	$2,701	$2,973	110.1%
2011	$2,718		
2011 YTD (Jun)	$2,718	$737	27.1%
2011 YE Projected	$2,718	$2,174	80.0%
2012	$2,228		

Goal - Number Of Projects

Year	Project Target	Project Actual	% of Goal Achieved
2000	225	317	140.9%
2001	294	258	87.8%
2002	253	276	109.1%
2003	298	148	49.7%
2004	236	237	100.4%
2005	307	367	119.5%
2006	344	310	90.1%
2007	240	357	148.8%
2008	340	490	144.1%
2009	630	559	88.7%
2010	475	340	71.6%
2011	371		
2011 YTD (Jun)	371	66	17.8%
2011 YE Projected	371	297	80.1%
2012	191		

$/Project

Year	Target	Actual	% of Goal Achieved
2000	$6,729	$3,795	56.4%
2001	$4,514	$6,182	137.0%
2002	$4,209	$3,612	85.8%
2003	$4,366	$5,716	130.9%
2004	$3,909	$3,563	91.1%
2005	$4,397	$3,777	85.9%
2006	$4,448	$5,284	118.8%
2007	$5,879	$5,161	87.8%
2008	$5,915	$3,760	63.6%
2009	$5,751	$3,881	67.5%
2010	$5,686	$8,744	153.8%
2011	$7,326		
2011 YTD (Jun)	$7,326	$11,168	152.4%
2011 YE Projected	$7,326	$7,320	99.9%
2012	$11,663		

Goal - Installed kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	6,417	5,274	82.2%
2001	5,761	6,506	112.9%
2002	4,765	6,279	131.8%
2003	6,250	3,578	57.2%
2004	4,930	4,399	89.2%
2005	6,895	7,590	110.1%
2006	6,733	5,830	86.6%
2007	5,670	7,644	134.8%
2008	7,564	9,480	125.3%
2009	14,753	7,914	53.6%
2010	9,251	7,789	84.2%
2011	7,717		
2011 YTD (Jun)	7,717	853	11.1%
2011 YE Projected	7,717	6,173	80.0%
2012	5,075		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	1,429	-	0.0%
2003	1,424	1,031	72.4%
2004	802	1,035	129.1%
2005	1,132	1,963	173.4%
2006	1,466	1,661	113.3%
2007	1,340	2,008	149.8%
2008	1,717	2,149	125.2%
2009	3,095	1,573	50.8%
2010	1,452	1,172	80.7%
2011	1,238		
2011 YTD (Jun)	1,238	131	10.6%
2011 YE Projected	1,238	990	80.0%
2012	861		

Goal - Lifetime kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	96,300	79,100	82.1%
2001	86,400	97,600	113.0%
2002	71,500	94,200	131.7%
2003	93,750	53,670	57.2%
2004	73,950	65,987	89.2%
2005	108,928	119,909	110.1%
2006	100,997	76,975	76.2%
2007	72,003	92,649	128.7%
2008	96,830	99,684	102.9%
2009	169,777	88,186	51.9%
2010	109,193	97,574	89.4%
2011	92,339		
2011 YTD (Jun)	92,339	10,810	11.7%
2011 YE Projected	92,339	73,871	80.0%
2012	64,552		

Program Ratios

Year	$/kWh Target	$/kWh Actual	$/LT kWh Target	$/LT kWh Actual	$/kW Target	$/kW Actual
2000	$0.236	$0.228	$0.016	$0.015	$0	$0
2001	$0.230	$0.245	$0.015	$0.016	$0	$0
2002	$0.224	$0.159	$0.015	$0.011	$745	$604
2003	$0.208	$0.236	$0.014	$0.016	$914	$821
2004	$0.187	$0.192	$0.012	$0.013	$1,150	$816
2005	$0.196	$0.183	$0.012	$0.012	$1,193	$706
2006	$0.227	$0.281	$0.015	$0.021	$1,044	$986
2007	$0.249	$0.241	$0.020	$0.020	$1,053	$918
2008	$0.266	$0.226	$0.021	$0.022	$1,171	$998
2009	$0.246	$0.274	$0.021	$0.025	$1,171	$1,380
2010	$0.292	$0.382	$0.025	$0.030	$1,860	$2,537
2011	$0.352		$0.029		$2,195	
2011 YTD (Jun)	$0.352	$0.864	$0.029	$0.068	$2,195	$5,627
2011 YE Projected	$0.352	$0.352	$0.029	$0.029	$2,195	$2,196
2012	$0.439		$0.035		$2,587	

Notes:
1. 2000-2002 data from LF-26 filed in 03-01-01
2. 2003 data reflects budgets approved in 03-01-01
3. 2004 data represents the revised budget allocations

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - Small Business Energy Advantage

Budget/(FTE):

1) Budget includes 2.05 FTEs for staffing
2) 2012 proposed overall budget is decrease by approx. 18% compared to the '11 revised budget
3) 2012 will include more non lighting incentives to increase comprehensiveness
4) 2012 incentives include transparent re-structured measure caps focusing on cost containment;
5) 2012 incentives include a comprehensive initiative with incentives consistent with the 2011
6) Program eligibility will be up to 200 kW consistent across the state
7) 2011 has experienced less than 1% default rate YTD.
8) Project financing costs reduce available incentive funds

Goal:

1) 2012 Target = 191 installed projects with 10% being comprehensive
2) 2012 target of 5,074,000 kWh; a decrease of approx. 34%
3) 2012 target of 861 kW; a decrease of approx. 30%
4) the market continues to need stimulation; 2012 will have similar incentive levels as 2011
5) ~87% of projects have come facilities less than 75 kW - limiting the savings opportunity
6) applied gross statewide realization rates

Cost/kWh (Cost/Unit):

1) 2012 projected cost rates per kWh: annual = $0.439, lifetime = $0.035
2) 2012 projected $$/kW = $2,587
3) project financing costs have been budgeted and increase the $$/kWh
4) adopted realization rates to be more consistent with CL&P;
5) adopted measure life values and coincidence factors to be more consistent with CL&P;
6) $/kW is higher due to refrigeration controls and HVAC conservation measures
   small impacts on peak kW
7) higher program costs are anticipated due to:
   a. negative impact from the sluggish economy
   b. increased costs from larger customers
   c. increased costs from the comprehensive initiative
   d. more outreach, training and education
   e. ongoing marketing strategies to increase inner city & minority participation
   f. rates from the recent impact evaluation was included in the cost rate calculation
8) small project size limits savings opportunity - see table below

Metric Changes:

1) all savings are reported as net values

Historical project breakdown by kW size

	2008	2009	2010	2011*	projects
kW Range	%	%	%	%	
0-25 kW	68%	81%	66%	*67%*	*110*
26-50 kW	15%	12%	18%	*16%*	*27*
51-75 kW	10%	4%	7%	*4%*	*6*
76-100 kW	3%	1%	3%	*4%*	*7*
101-125 kW	3%	2%	5%	*5%*	*8*
126-150 kW	1%	0%	1%	*1%*	*2*
151-200 kW			1%	*2%*	*4*
totals	100%	100%	100%	*100%*	*164*

(*) 2011 installed projects are based on installed and signed projects as of 06/30/11

YGS Standard Filing Requirement

Small Business

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 10,660	
Outside Service	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 1,680	
Materials & Supplies	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 140	
Incentives	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 71,900	
Marketing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 1,000	
Administrative Expense	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 14,620	
Total									$ 100,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	31,692	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	364,538	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 3.16	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 0.27	e=a/c
Total Gas Benefit	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 203,117	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 2.03	g=f/a
Customers Served	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11	h
Lifetime Savings per Customer (ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33,187	i=c/h
Program Cost per Customer	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 9,104	k=a/h
Benefit per Customer	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 18,492	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	$ 100,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	11	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	31,692	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	364,538	n/a	-

CNG Standard Filing Requirement

Small Business

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 10,664	
Outside Service	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 1,680	
Materials & Supplies	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 135	
Incentives	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 76,901	
Marketing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 996	
Administrative Expense	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 9,624	
Total									$ 100,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33,896	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	389,894	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 2.95	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 0.26	e=a/c
Total Gas Benefit	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 217,422	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 2.17	g=f/a
Customers Served	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12	h
Lifetime Savings per Customer (ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33,187	i=c/h
Program Cost per Customer	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 8,512	k=a/h
Benefit per Customer	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 18,507	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	$ 100,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	12	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	33,896	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	389,894	n/a	-

SCG Standard Filing Requirement

Small Business

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 10,664	
Outside Service	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 1,680	
Materials & Supplies	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 135	
Incentives	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 76,901	
Marketing	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 996	
Administrative Expense	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 9,624	
Total									$ 100,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33,896	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	389,894	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 2.95	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 0.26	e=a/c
Total Gas Benefit	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 217,422	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 2.17	g=f/a
Customers Served	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12	h
Lifetime Savings per Customer (ccf)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	33,188	i=c/h
Program Cost per Customer	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 8,512	k=a/h
Benefit per Customer	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$ 18,507	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	$ 100,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	12	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	33,896	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	n/a	n/a	-
2010	n/a	n/a	-
2011 YTD (June)	n/a	n/a	-
2011 YE projection	n/a	n/a	-
2012	389,894	n/a	-

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Business and Energy Sustainability (formerly Operations & Maintenance) Program

Objective:

The objectives of the Business and Energy Sustainability ("BES") program are to (1) help customers improve the electrical and thermal efficiency of their building's infrastructure through operational improvements and adjustment of building controls, rather than capital investments, and to (2) provide customers with the knowledge and the means to maintain equipment and system performance on an ongoing basis. Meeting these objectives includes implementing things such as (1) investigating ways of upgrading functioning but inefficient equipment within the C&I environment; (2) repairing and/or retrofitting existing equipment with better performing control devices; (3) improving a facility's overall energy performance, and (4) developing long-term, sustainable, energy-saving relationships and plans with customers that includes encouraging participants to benchmark and track their energy consumption over time.

Target Market:

The target market for this program is comprised of all C&I customers including owners and managers of multi-family residential buildings. The multifamily sector represents a target market that often straddles the eligibility requirements of both C&I and Residential program offerings.

Program Description:

As indicated by the program's objectives, the Business and Energy Sustainability (BES) Program is best characterized as a "programmatic melting pot" that addresses capturing the potential energy savings from a combination of information-based behavioral change and capital investments by the customer. This program was formerly named Operations and Maintenance (or O&M), but the Companies and consultants to the EEB have come to realize that the terminology "O&M" is too vague and does not get to the heart of what the EDCs are trying to accomplish with their customers. BES, on the other hand, attempts to focus on energy savings resulting from changes in individual or organizational behavior and decision-making. For example, BES will strive to use various forms of energy use feedback mechanisms like energy dashboard tools to show the end-user how much energy they have used compared to another point in time. Many efficiency program administrators across the country have begun to focus on this softer, cultural aspect of saving energy.[18] Traditionally, a customer has been willing to make the necessary capital investments to improve their facility's energy efficiency with assistance from incentive programs. However, once the equipment is installed, little is done to either (a) maintain its operating efficiency or (b) improve the facility's overall energy performance. The level of

[18] Some examples of information-based, behavioral efficiency programs and collaborative working groups are referenced by the web pages below:

http://www.bpa.gov/energy/n/behavior.cfm

http://opower.com/uploads/library/file/10/brattle_mv_principles.pdf

http://www.beccconference.org/

commitment for behavioral change that the customer makes has a direct impact on their business's ability to be operationally efficient and sustainable. In addition, BES program markets are complex and are comprised of multiple segments, multiple agents within buildings and facilities, multiple service providers and multiple vendors, each creating various market barriers and opportunities. Therefore, Business and Energy Sustainability is comprised of the following five programmatic components, all of which are described in more detail later:

1. Retro-Commissioning ("RCx")
2. Process Re-engineering for Increased Manufacturing Efficiency ("PRIME")
3. Business Sustainability Challenge ("BSC")
4. Operations & Maintenance Services ("O&M")
5. Training and Outreach

These components are considered the "tools" to facilitate our customers achieving greater levels of efficiency and sustainability. These operational and behavior- based components of the program, coupled with the core C&I programs, provide the opportunity for customers to achieve more sustainable, comprehensive solutions to their energy needs. In 2012, the BES program will continue its transformation to a more detailed, customer-focused approach, which is expected to further enhance energy management behaviors among C&I customers.

Retro-Commissioning

The Retro-Commissioning ("RCx") initiative will continue to be offered by the Electric and Natural Gas Companies as a BES program component with comparable funding and expanded exposure in 2012. The RCx process conducts an in-depth, engineering investigation of a facility's systems operations, which focuses on integrating more efficient and effective instructions for the building management systems. The main objective of RCx is to find low-cost/no cost, non-capital, energy-efficient measures that will quickly and effectively result in energy savings for the owner of the building. The program targets Connecticut's larger customer facilities in the commercial and industrial market segment, and the large institutional segment.

PRIME

PRIME is an acronym for Process Re-engineering for Increased Manufacturing Efficiency. The objective of the PRIME program is to teach manufacturers how to implement "Lean Manufacturing" techniques. Lean manufacturers are able to produce more with existing resources by eliminating non-value-added activities and waste, and by aligning production to meet actual customer demand. In addition, lean manufacturing results in the more efficient use of energy per product produced by reducing non-manufacturing related electricity consumption and by reducing losses in manufacturing equipment consumption. The PRIME program offers eligible customers the opportunity to participate in up to four separate three-and-a-half day, team-based Kaizen events at their facility which teach the fundamentals of lean manufacturing and facilitates the implementation of quick changes to a process in order to eliminate waste and improve efficiency. The first two events are at no cost to the customer. The third and fourth events require the customer to contribute 50 percent of the cost. Events thereafter

are fully funded by the customer. More details on the PRIME program can be found in the PRIME section of this plan.

Business Sustainability Challenge

The Business Sustainability Challenge ("BSC") is one of the primary components of the customer's transformation to greater efficiency and sustainability. Initiated as a pilot in 2008, the BSC training and educational initiative is the result of a shared vision of the Energy Efficiency Board's C&I Committee and the Electric and Natural Gas Companies. It provides an opportunity for customers to not only address their energy management practices and investments, but also their long-term social, environmental and economic sustainability objectives through formal and informal education, plan development and implementation, and continuous improvement practices. The BSC employs a holistic approach to training, educating and working with medium-size to larger customers, with the ultimate goal of integrating sustainability into their business practices and manage energy, carbon, waste and water as valuable resources.

The BSC training and education pilot will continue to be offered in two tracks, A and B. Both tracks will identify prospects and specific targets through customer participation in other Energy Efficiency Fund programs, such as PRIME. Track A is primarily geared for working with individual customers directly to establish a plan, timeline and then implement it. Track B is primarily focused on class room-style education and information for those customers who desire to better understand what their organizations can do to become more sustainable. While each track takes a slightly different approach to working with customers, both will follow the steps outlined below (with minor modifications made by each track), using shared tools and resources (note: steps have been borrowed from the ENERGY STAR Energy Management Process Model):

- Obtain a commitment.
- Assess performance and set goals.
- Create a plan.
- Implement the plan.
- Evaluate the plan's progress.
- Recognize achievements.
- Re-assess the process.

Track A major components:

- a multi-year commitment coupled with several consultative meetings and the establishment of energy efficiency and sustainability plans and goals
- formation of an energy/sustainability team
- a Sustainability, Energy Management and/or Carbon Inventory Assessment

- a facility walk through and technical scoping which includes review and prioritization of assessments, audits, studies, carbon inventory and ideas from staff and management
- development of a Sustainability and Energy Management Action Plan, and ultimately
- an integrated Sustainability and Energy Management strategy that identifies reduction goals, the specific activities that the customer will engage in with the assistance of the Electric Companies (including energy management activities); sustainability initiatives; investment priorities; educational opportunities; employee training and monitoring and reporting systems for future years.

Track B has, in the past, been comprised of the following class room-style course content, including:

- Sustainable Business Practices;
- Energy-Carbon Footprint Management;
- Creating the Sustainability Playbook;
- Lean to Green Manufacturing Practices;
- Benchmarking – the value and the tools;
- Sustainable Supply Chains;
- Sustaining Sustainability through O&M and Continuous Improvement, and;
- Marketing the Sustainable Business.

The classroom setting encouraged networking and sharing best practices, while receiving training in various subjects. In 2012, the BSC training and education initiative will continue to be managed as Tracks A & B, empowering customers to identify both low-cost and long-term resource solutions specific to their facilities and operations, implement new strategies and behaviors and obtain near term results that are sustainable over the long term. In addition to classroom settings, on-line "webinars" and other methods of training may be incorporated into the Track B experience. Both market data and customer feedback will be used to determine the strengths and weaknesses of each Track's approach, and how best to combine the most valuable elements of the original pilot approaches to best meet customer needs.

O&M Services

O&M Services offers electric and natural gas incentives and analytical services for C&I customers to improve operation and maintenance of their facilities in order to make them more energy efficient. The Electric and Natural Gas Companies provide O&M evaluations and recommendations upon request, with the C&I customer being responsible for implementing the O&M improvements. Examples of such improvements which are intended to maximize operational efficiency and optimize performance include things like compressed-air system leak studies and repairs, modifications and/or repairs to building management system control components and software programming. The Electric and Natural Gas

Companies will consider piloting and testing promising concepts, technologies and services for eventual inclusion in the program. The results of these efforts may be used to make incremental improvements to what used to be known as the O&M Services program. The O&M Services program features (e.g., commissioning, training, etc.) are being considered for incorporation into other C&I programs as well. This will ensure that as the new energy-saving equipment is installed, facility staff will be provided with appropriate training to maintain equipment at maximum operational efficiency.

Training and Outreach

In 2012, the Electric and Natural Gas Companies will continue to sponsor and provide focused training to help C&I customers improve their building energy management, operations and maintenance and sustainability activities. A variety of training opportunities will again be offered with the emphasis being on facilities and property managers as the target audience. The Electric and Natural Gas Companies have continued to be successful in identifying and providing training in the efficient operation of building systems to help qualify facility operators and maintenance staff for certification. The 2012 training curriculum is expected to incorporate program topics such as:

- Certified Energy Manager, BOC or equivalent:
- K-12 School Facility Maintenance;
- Energy Basics and Energy Action Planning;
- Building Automation Systems;
- Efficiency projects Financing using Energy Star financial tools
- Energy Start Portfolio Manager
- ComCheck
- Boiler & Chiller performance enhancements
- Gas heating and process technologies
- Commissioning; Retro-Commissioning
- Compressed Air Challenges I and II.

In addition, training opportunities will be explored that target improving awareness and energy-efficient management behaviors among C&I customers.

To further the expansion of the training and education component of the program, BES will focus on low cost/no cost opportunities for customers to achieve savings that are sustainable. The program will not include significant capital investments.

Process Reengineering for Increased Manufacturing Efficiency ("PRIME")
(A complete PRIME program description can be found later in this chapter)

Marketing Strategy:

While the target market for the BES program is the C&I customer, a large percentage of the marketing efforts are directed at the audience that provides the services--the engineering and contractor community. By focusing our promotions on this sector of the community, we are encouraging the development of a market-based energy- efficiency industry. Some of the ways we promote and support the engineering and contractor community may include:

- technical and program-specific training seminars offered throughout the year, which will be promoted using e-mail notices linking users to an on-line registration system;
- participation in strategically selected association events, which may also include submission of technical papers, presentations, etc., and
- writing and distribution of case studies (also referred to as Success Stories or Testimonials) to various relevant marketing and media channels.

To a lesser extent, the Electric and Natural Gas Companies will target building owners, business owners, facility managers and energy managers using some of the tactics above, in addition to:

- targeted mailings to customers (print and e-mail) directing them to the Electric and Natural Gas Companies' web sites and CTEnergyinfo.com;
- presence at strategically-selected business expos/shows;
- articles and notices posted on electronic Electric and Natural Gas Companies' electronic newsletters, and;
- reaching out to BSC participant targets identified through knowledgeable customer managers, e.g., sales engineers and strategic account managers and participation in other Energy Efficiency Fund programs such as PRIME.

It should be noted that marketing for the specific programmatic tools (identified in the Program Description) may vary based on the needs of each program.

Incentive Strategy:

The incentive structures for BES are aligned with those found mostly in the EO program, but are not as extensive. However, incentives may be tailored based upon the specific nature of each proposal. In some cases, portions of the selected customer's project may qualify for incentives under the EO or ECB programs and may be included in the BES Agreement to the customer. In UI's service territory,

customers may receive incentives (based on a co-pay) for evaluations identifying appropriate measures being recommended for implementation from the BES program. Please refer to the incentive tables located in the appendix at the back of Chapter 3.

Goals:

Refer to Standard Filing Requirements for program goals.

New Program Issues:

To further the goal of long-term sustainability for Connecticut's businesses and industries, the Electric and Natural Gas Companies will continue to work on developing, refining and implementing each of the program tools by investing additional fund dollars into the programs, broadening the use of benchmarking and dashboards; broadening the base of technologies eligible for incentives; developing a smaller RCx offering that is applicable to smaller sized customers, and broadening the training and types of courses that are offered.

In 2012, both BSC tracks will incorporate lessons learned from the previous years' pilot initiatives, with a goal of eventually offering a stable portfolio-base program, which will utilize tools, technology, and a train-the-trainer model to take this program to scale and be available to any interested business customer in Connecticut. The BSC will become more of an integrated offering for customers participating in other Fund incentive programs and will showcase best practices and case study examples of sustainable businesses. The vision for this program is to consistently engage and educate customers through a website, e-newsletters, live and e-training seminars and networking events, all of which will provide customers with the information, motivation and support to continuously improve, as well as provide and/or encourage use of the assessment and tracking tools needed to benchmark their progress.

An important goal of the BES program will be to find new ways to encourage and motivate customers to engage in energy and sustainability data collection, tracking and benchmarking, which is one of the key pre-requisites for creating energy and sustainability-related behavioral changes in an organization

Additionally, the lessons and opportunities learned in the RCx program projects over the past years will be woven in to the ECB new construction building program through the new building enhanced commissioning opportunity.

CL&P Issues:

UI Issues:

CL&P Standard Filing Requirement

O&M Services (Roll-Up) (includes O&M Services and O&M Retro-Commissioning Extension)

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor								
NU Labor	$ 192	$ 361	$ 806	$ 185	$ 516	$ 517		$ 517
Contractor Staff	$ 19	$ 6	$ 60	$ 0	$ 38	$ 52		$ 52
Total Labor	$ 211	$ 367	$ 866	$ 185	$ 554	$ 569		$ 569
Materials & Supplies	$ 4	$ 2	$ 10	$ 4	$ 6	$ 10		$ 10
Outside Services	$ 314	$ 485	$ 642	$ 277	$ 411	$ 638	a)	$ 638
Incentives	$ 547	$ 459	$ 3,094	$ 299	$ 1,981	$ 2,844	b)	$ 2,843
Marketing	$ 12	$ 15	$ 66	$ 5	$ 42	$ 60	c)	$ 60
Administrative Expenses	$ 4	$ 15	$ 37	$ 2	$ 24	$ 35	d)	$ 35
Other	$ 8	$ 4	$ 15	$ 2	$ 10	$ 15		$ 15
Total	$ 1,102	$ 1,347	$ 4,730	$ 775	$ 3,028	$ 4,171	e)	$ 4,171

a) Consultants for focused studies, quality assurance/quality control (QA/QC) and inspections as necessary.

b) Incentives paid directly to customers for the installation of cost effective energy conservation measures.

c) Market program to customers, trade allies and professional organizations.

d) Employee expenses including mileage, training, conference attendance, misc.

e) Includes O&M Services and Retro commissioning budgets.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	1,871.2
Annual Energy Savings (KWh Reduction Goal)	16,847,299
Lifetime Energy Savings (kWh Reduction Goal)	154,181,561
Annual Cost Rate ($/kWh)	$ 0.254
Lifetime Cost Rate ($/kWh)	$ 0.028
Electric b/c Ratio	3.74
Total Resource b/c Ratio	2.62

CL&P Standard Filing Requirement

O&M Services

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor								
NU Labor	$ 73	$ 32	$ 721	$ 81	$ 54	$ 212		$ 212
Contractor Staff	$ 19	$ 6	$ 54	$ 0	$ 4	$ 43		$ 43
Total Labor	$ 92	$ 37	$ 775	$ 81	$ 58	$ 255		$ 255
Materials & Supplies	$ 4	$ 2	$ 9	$ 4	$ 4	$ 2		$ 2
Outside Services	$ 65	$ 107	$ 575	$ 16	$ 40	$ 128	a)	$ 108
Incentives	$ (11)	$ 131	$ 2,769	$ 35	$ 208	$ 569	b)	$ 483
Marketing	$ 9	$ 4	$ 59	$ 4	$ 4	$ 12	c)	$ 10
Administrative Expenses	$ 3	$ -	$ 33	$ 2	$ 2	$ 7	d)	$ 6
Other	$ 8	$ 4	$ 13	$ 1	$ 1	$ 3		$ 3
Total	$ 170	$ 285	$ 4,233	$ 142	$ 318	$ 976		$ 867

a) Consultants for focused studies, quality assurance/quality control (QA/QC), and inspections as necessary.
Increase to Outside Services and Labor in 2010 and 2011 for Building Sustainability Challenge (BSC).

b) Incentives paid directly to customers for the installation of cost effective energy conservation measures. Includes $50K for BSC initiative.

c) Market program to customers, trade allies, and professional organizations.

d) Employee expenses including mileage, training, conference attendance and misc.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	377.4
Annual Energy Savings (KWh Reduction Goal)	6,839,880
Lifetime Energy Savings (kWh Reduction Goal)	39,316,057
Annual Cost Rate ($/kWh)	$ 0.143
Lifetime Cost Rate ($/kWh)	$ 0.025
Electric b/c Ratio	3.64
Total Resource b/c Ratio	1.97

CL&P Standard Filing Requirement

O&M Services Only (incl. RFP)

Program Costs

Year	Budget	Actual	% of Budget	$/LT-kWh
2000	$ 3,747,000	$ 3,662,535	98%	0.015
2001	$ 2,421,000	$ 2,822,027	115%	0.015
2002	$ 1,204,000	$ 617,000	51%	0.018
2003	$ 1,300,000	$ 450,905	35%	0.044
2004	$ 1,250,000	$ 933,762	75%	0.024
2005 Revised	$ 2,646,416	$ 1,833,005	69%	0.018
2006 Revised	$ 2,156,000	$ 1,149,265	53%	0.023
2007 Revised	$ 1,984,000	$ 838,615	42%	0.019
2008 Revised	$ 1,647,521	$ 1,222,862	74%	0.021
2009 Revised	$ 295,000	$ 168,065	57%	0.010
2010 Revised	$ 814,000	$ 479,531	59%	0.057
2011 Revised	$ 1,154,000	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 142,420	17%	0.195
2011 Y/E Projected	$ 1,154,000	$ 317,970	39%	0.048
2012	$ 975,550	n/a	n/a	n/a

Goal - Participation

Year	Goal [2]	Actual	% of Goal
2000	3,305	3,093	94%
2001	2,100	2,236	106%
2002	519	306	59%
2003	88	14	16%
2004	151	18	12%
2005 Revised	236	30	13%
2006 Revised	35	21	60%
2007 Revised	25	15	60%
2008 Revised	6	61	1017%
2009 Revised	20	15	75%
2010 Revised	6	12	200%
2011 Revised	17	n/a	n/a
2011 YTD (Jun)	n/a	3	18%
2011 Y/E Projected	17	12	71%
2012	18	n/a	n/a

Goal - Lifetime MWh savings

Year	Goal (MWh)	Actual (MWh)	% of Goal
2000	283,896	252,573	89%
2001	185,348	184,295	89%
2002	33,636	33,643	100%
2003	18,182	10,201	56%
2004	49,534	38,613	72%
2005 Revised	108,025	101,711	96%
2006 Revised	67,112	49,970	56%
2007 Revised	48,970	45,058	92%
2008 Revised	108,582	59,455	55%
2009 Revised	43,333	16,364	38%
2010 Revised	27,980	8,467	30%
2011 Revised	80,223	n/a	n/a
2011 YTD (Jun)	n/a	730	1%
2011 Y/E Projected	80,223	6,562	8%
2012	39,316	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2000	n/a	4,428	n/a
2001	n/a	2,498	n/a
2002	n/a	548	n/a
2003	185	142	76.8%
2004	801	774	74.8%
2005 Revised	1,741	1,147	69.5%
2006 Revised	971	403	31.1%
2007 Revised	655	405	61.8%
2008 Revised	291	523	179.7%
2009 Revised	190	263	138.2%
2010 Revised	299	82	27.4%
2011 Revised	1,057	n/a	n/a
2011 YTD (Jun)	n/a	26	2.5%
1 Y/E Projected	1,057	270	25.5%
2012	377	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2000	0.013	0.015	n/a	827
2001	0.013	0.015	n/a	1,099
2002	0.036	0.018	n/a	1,125
2003	0.046	0.044	2,781	3,175
2004	0.019	0.024	0	1,206
2005 Revised	0.024	0.018	1,520	1,598
2006 Revised	0.032	0.023	2,220	2,852
2007 Revised	0.041	0.019	3,029	2,071
2008 Revised	0.015	0.021	5,662	2,338
2009 Revised	0.007	0.010	1,553	640
2010 Revised	0.029	0.057	770	5,848
2011 Revised	0.014	n/a	n/a	n/a
2011 YTD (Jun)	n/a	0.195	n/a	5,478
2011 Y/E Projected	n/a	0.048	3,058	1,178
2012	0.025	n/a	2,585	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - O&M Services Only (incl. RFP)

Budget / FTE

1.6	FTEs for Program Administration, inspections, etc.

Goal

Demand Savings (kW Reduction Goal)		377
Lifetime Energy Savings (kWh Reduction Goal)		39,316,057

Cost/kWh (Cost/Unit)

$/Annualized kW	$	2,585
$/Lifetime kWh	$	0.025

Goal Setting Methodology

The 2011 planning model is based on 2010 actual results.
Savings were adjusted based on new incentive structure.

Metric Changes

None.

CL&P Standard Filing Requirement

O&M Retro Commissioning

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor								
NU Labor	$ 119	$ 330	$ 85	$ 104	$ 462	$ 305		$ 305
Contractor Staff	$ -	$ 1	$ 6	$ 0	$ 34	$ 9		$ 9
Total Labor	$ 119	$ 330	$ 91	$ 104	$ 496	$ 314		$ 314
Materials & Supplies	$ -	$ 0	$ 1	$ -	$ 6	$ 8		$ 8
Outside Services	$ 249	$ 379	$ 67	$ 262	$ 368	$ 510	a)	$ 529
Incentives	$ 558	$ 328	$ 325	$ 265	$ 1,773	$ 2,275	b)	$ 2,360
Marketing	$ 3	$ 10	$ 7	$ 1	$ 38	$ 48		$ 50
Administrative Expenses	$ 1	$ 15	$ 4	$ 1	$ 21	$ 28	c)	$ 29
Other	$ 0	$ 0	$ 2	$ -	$ 9	$ 12		$ 12
Total	$ 932	$ 1,062	$ 497	$ 632	$ 2,710	$ 3,196		$ 3,303

a) Fees to third-party vendors who will perform retrocommissioning services.

b) Incentives paid to customers for Retro Commissioning measures including facility control modifications that will help enable long-term energy savings.

c) Employee expenses including mileage, training, conference attendance and misc.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	1,971.9
Annual Energy Savings (KWh Reduction Goal)	10,510,458
Lifetime Energy Savings (kWh Reduction Goal)	105,104,584
Annual Cost Rate ($/kWh)	$ 0.304
Lifetime Cost Rate ($/kWh)	$ 0.030
Electric b/c Ratio	3.22
Total Resource b/c Ratio	1.83

CL&P Standard Filing Requirement

O&M Retro Commissioning

Program Costs

Year	Budget	Actual	% of Budget	$/LT-kWh
2005 Revised	$ 800,000	$ -	0%	0
2006 Revised	$ 1,300,000	$ 286,037	22%	0.023
2007 Revised	$ 1,300,000	$ 275,207	21%	0.251
2008 Revised	$ 908,000	$ 707,028	78%	0.026
2009 Revised	$ 1,805,000	$ 932,000	52%	0.076
2010 Revised	$ 814,000	$ 867,710	107%	0.036
2011 Revised	$ 3,575,740	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 632,009	18%	0.081
2011 Y/E Projected	$ 3,575,740	$ 2,710,317	76%	0.038
2012	$ 3,195,700	n/a	n/a	n/a

Goal - Participation

Year	Goal [2]	Actual	% of Goal
2005 Revised			-
2006 Revised	24	5	21%
2007 Revised	7	3	43%
2008 Revised	7	3	43%
2009 Revised	23	7	30%
2010 Revised	24	8	33%
2011 Revised	69		n/a
2011 YTD (Jun)	n/a	3	4%
2011 Y/E Projected	69	12	17%
2012	72	72	n/a

Goal - Lifetime MWh savings

Year	Goal (MWh)	Actual (MWh)	% of Goal
2005 Revised			
2006 Revised	44,741	12,492	28%
2007 Revised	32,646	1,096	3%
2008 Revised	38,150	27,264	71%
2009 Revised	104,191	12,276	12%
2010 Revised	148,786	23,935	16%
2011 Revised	96,870	n/a	n/a
2011 YTD (Jun)	n/a	7,851	8%
2011 Y/E Projected	96,870	70,541	73%
2012	105,105	n/a	n/a

Goal - Installed kW Savings

Year	Goal	Actual	%of Goal
2005 Revised			
2006 Revised	647	101	15.6%
2007 Revised	436	28	6.4%
2008 Revised	341	188	55.1%
2009 Revised	170	113	66.5%
2010 Revised	1,213	449	37.0%
2011 Revised	1,066	n/a	n/a
2011 YTD (Jun)	n/a	62	5.8%
1 Y/E Projected	1,066	640	60.0%
2012	1,972	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2005 Revised	-	-	-	-
2006 Revised	0.029	0.023	2,009	2,832
2007 Revised	0.040	0.251	2,982	9,829
2008 Revised	0.024	0.026	2,663	3,761
2009 Revised	0.017	0.076	10,618	8,248
2010 Revised	0.005	0.036	671	1,933
2011 Revised	0.037	n/a	3,354	n/a
2011 YTD (Jun)	n/a	0.081	n/a	10,194
2011 Y/E Projected	n/a	0.038	3,354	4,235
2012	0.030	n/a	1,621	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - O&M Retro Commissioning

Budget /FTE

2.3	FTE for program administration.

Goal

Demand Savings (kW Reduction Goal)	1,972
Lifetime Energy Savings (kWh Reduction Goal)	105,104,584

Cost/kWh (Cost/Unit)

$/Annualized kW	$	1,621
$/Lifetime kWh	$	0.030

Goal Setting Methodology

The 2011 planning model is based on 2010 actual results.
Savings were adjusted based on new incentive structure.

Metric Changes

None

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

O&M Services (1)

Baseline Assumptions:

Market: All C&I customers

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 44,771	$ 45,811	$ 17,187	$ 45,811	$ 31,696	a)	$ 33,281
Contractor Staff	$ 1,272	$ -	$ -	$ -	$ -	b)	$ -
Total Labor	$ 46,043	$ 45,811	$ 17,187	$ 45,811	$ 31,696		$ 33,281
Materials & Supplies	$ 113	$ 1,000	$ 498	$ 1,000	$ 1,000	c)	$ 1,000
Outside Services	$ 135,958	$ 308,000	$ 137,198	$ 300,797	$ 476,400	d)	$ 476,400
Incentives	$ 740	$ 145,000	$ (2,000)	$ 145,000	$ 214,000	e)	$ 207,850
Marketing	$ 459	$ 8,000	$ 400	$ 8,000	$ 15,000	f)	$ 15,000
Other	$ -	$ 1,000	$ -	$ 1,000	$ 1,250	g)	$ 1,250
Administrative Expenses	$ 4,601	$ 6,864	$ 14,067	$ 14,067	$ 8,093	h)	$ 8,000
Total	$ 187,914	$ 515,675	$ 167,350	$ 515,675	$ 747,439		$ 742,781

(1) Includes O&M Svcs, RetroCx, BSC, PRIME and K-12 Pilot

a) .27 FTE
b) no comment
c) expenses shared by O&M, BSC,Training, RetroCx,and K-12 Pilot
d) expenses shared by O&M, BSC,Training, RetroCx,and K-12 Pilot
e) no comment
f) expenses shared by O&M, BSC,Training, RetroCx,and K-12 Pilot
g) no comment
h) expenses shared by O&M, BSC,Training, RetroCx,and K-12 Pilot

Goals and Metrics Information: Savings	2012
Demand Savings (kW)	176
Annual Energy Savings (kWh)	1,922,785
Lifetime Energy Savings (kWh)	13,903,656
Annual Cost Rate ($/kWh)	$ 0.389
Lifetime Cost Rate ($/kWh)	$ 0.054
Cost per kW	$ 4,244
Electric System B/C Ratio	1.65
Total Resource B/C Ratio	1.57

The United Illuminating Company
LF-26 Standard Filing Requirement

O&M Services

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$0	$0	0.0%
2001	$100	$0	0.0%
2002	$235	$0	0.0%
2003	$167	$70	42.2%
2004	$182	$184	101.1%
2005	$182	$108	59.3%
2006	$352	$72	20.5%
2007	$322	$141	43.8%
2008	$322	$17	5.3%
2009	$658	$133	20.2%
2010	$530	$188	35.5%
2011	$516		
2011 YTD (Jun)	$516	$167	32.4%
2011 YE Projected	$516	$258	50.0%
2012	$747		

Goal - Installed kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	200	-	0.0%
2004	200	-	0.0%
2005	200	2,206	1103.0%
2006	2,000	1,453	72.7%
2007	2,000	2,386	119.3%
2008	1,300	-	0.0%
2009	3,712	498	13.4%
2010	2,196	453	20.6%
2011	1,186		
2011 YTD (Jun)	1,186	8	0.7%
2011 YE Projected	1,186	593	50.0%
2012	1,923		

Goal - Installed kW Savings

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	34	-	0.0%
2004	23	-	0.0%
2005	23	674	2930.4%
2006	210	237	112.8%
2007	210	55	26.0%
2008	100	-	0.0%
2009	90	27	30.0%
2010	70	-	0.0%
2011	168		
2011 YTD (Jun)	168	-	0.0%
2011 YE Projected	168	84	50.0%
2012	176		

Goal - Lifetime kWh Savings (000's)

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	-	-	0.0%
2003	3,000	-	0.0%
2004	2,000	-	0.0%
2005	2,000	22,061	1103.1%
2006	20,000	21,790	109.0%
2007	20,000	35,790	179.0%
2008	13,000	-	0.0%
2009	18,562	3,640	19.6%
2010	10,980	2,855	26.0%
2011	7,276		
2011 YTD (Jun)	7,276	40	0.5%
2011 YE Projected	7,276	3,638	50.0%
2012	13,904		

Program Ratios

	$/kWh		$/LT kWh		$/kW	
Year	Target	Actual	Target	Actual	Target	Actual
2000	$0.000	$0.000	$0.000	$0.000	$0	$0
2001	$0.000	$0.000	$0.000	$0.000	$0	$0
2002	$0.000	$0.000	$0.000	$0.000	$0	$0
2003	$0.835	$0.000	$0.056	$0.000	$4,912	$0
2004	$0.910	$0.000	$0.091	$0.000	$7,913	$0
2005	$0.910	$0.049	$0.091	$0.005	$7,913	$160
2006	$0.176	$0.050	$0.018	$0.003	$1,676	$455
2007	$0.161	$0.059	$0.016	$0.004	$1,533	$2,578
2008	$0.248		$0.025		$3,220	$0
2009	$0.177	$0.267	$0.035	$0.037	$7,311	$4,926
2010	$0.241	$0.415	$0.048	$0.066	$7,571	$0
2011	$0.435		$0.071		$3,071	
2011 YTD (Jun)	$0.435	$20.919	$0.071	$4.184	$3,071	
2011 YE Projected	$0.435	$0.435	$0.071	$0.071	$3,071	$3,071
2012	$0.389		$0.054		$4,244	

Notes
1. 2000-2002 data from LF-26 filed in 03-01-01
2. 2003 data reflects budgets approved in 03-01-01
3. 2004 data repesents the revised budget allocations
4. Program jointly operated with CL&P
5. O&M RFP contains Adminstrative costs for RetroCX, BOC, Envinta, and BSC
6. 2011 $$/kW is calculated with the total budget. Only O&M contributes to peak demand savings; see notes for more information.

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - O&M Services

Budget/(FTE):

1) budget includes .27 FTEs for staffing
2) 2012 proposed overall budget is within 144% of the '11 revised (04/2011) budget
3) 2012 budget houses administrative costs for O&M, BSC, RetroCx, and Prime
4) incentives offered for RetroCx and O&M type measures based on EO incentive structure
5) budget includes specialized training costs
6) Business Sustainability Challenge (BSC) is approximately 8% of the overall O&M budget
7) K-12 pilot is approximately 5% of the overall O&M budget
8) Prime program is approximately 17% of the overall O&M budget
9) RetroCx program is approximately 58% of the overall O&M budget
10) O&M Services is approximately 12% of the overall O&M budget

Goal:

1) 2012 target of 1,922,785 kWh; a increase of approx. 62%
2) 2012 target of 176 kW; significantly increased to account for RetroCx impacts
3) any direct savings from Business Sustainability implementation are included this program
4) any direct savings from Prime implementation are included this program
5) goals impacted by the overall over-expenditure in other programs
6) marketing focus continues throughout UI territory
7) adopted CL&P gross realization rates to simulate statewide realization rates

Cost/kWh (Cost/Unit):

1) 2012 kWh and kW projections reflect the uncertainty of RetroCx, Prime & BSC.
   a. program initiatives such as BSC, Prime will produce no peak kW savings.
2) 2012 total projected cost rates: annual = $0.389/ kWh, lifetime = $.054/ kWh
3) 2012 projected $$/kW = $4,244 for O&M & RCx. Prime and BSC do not contribute to kW savings
4) estimated RetroCx cost rates based on historical data
5) The component cost rate breakdown for O&M Services is as follows:

	Budget	kWh	kW	$$/ kWh	$$ / kW	$$/ LkWh
O&M Svcs	*86*	*246*	*72*	*$ 0.350*	*$ 1.194*	*$ 0.0699*
RetroCx	*445*	*1,176*	*104*	*$ 0.378*	*$ 4.279*	*$ 0.0378*
Prime	*116*	*425*	*0*	*$ 0.273*	*n/a*	*$ 0.0546*
BSC	*60*	*76*	*0*	*$ 0.784*	*n/a*	*$ 0.1568*
K-12	*40*	n/a	n/a	n/a	n/a	n/a

Metric Changes:

1) all savings are reported as net values

YGS Standard Filing Requirement

Operations & Maintenance

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 5,317	$ 10,775	$ 5,006	$ 65,170	$ 1,587	$ 34,173	$ 65,170	
Outside Service	n/a	n/a	$ 2,090	$ 3,431	$ 618	$ 5,500	$ 60	$ 132	$ 5,500	
Materials & Supplies	n/a	n/a	$ 101	$ -	$ 517	$ 500	$ -	$ -	$ 500	
Incentives	n/a	n/a	$ -	$ 3,250	$ 116,347	$ 125,930	$ -	$ 39,072	$ 125,930	
Marketing	n/a	n/a	$ 742	$ 430	$ 828	$ 2,600	$ 527	$ 1,054	$ 2,600	
Administrative Expense	n/a	n/a	$ -	$ -	$ 21	$ 300	$ -	$ -	$ 300	
Total			$ 8,249	$ 17,885	$ 123,338	$ 200,000	$ 2,174	$ 74,432	$ 200,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	6,683	66,979	81,669	-	57,168	81,938	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	66,830	669,798	653,353	-	457,347	819,390	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	$ 2.68	$ 1.84	$ 2.45	-	$ 1.30	$ 2.44	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	$ 0.27	$ 0.18	$ 0.31	-	$ 0.16	$ 0.24	e=a/c
Total Gas Benefit	n/a	n/a	n/a	$ 60,492	$ 616,062	$ 600,936	$ -	$ 420,655	$ 489,969	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	$ 3.38	$ 4.99	$ 3.00	$ -	$ 5.65	$ 2.45	g=f/a
Customers Served	n/a	n/a	n/a	1	3	23		14	5	h
Lifetime Savings per Customer (ccf)	n/a	n/a	n/a	66,830	223,266	28,407	-	1.09	156,152	i=c/h
Program Cost per Customer	n/a	n/a	n/a	$ 17,885	$ 41,113	$ 8,696	-	$ 13,170	$ 38,114	k=a/h
Benefit per Customer	n/a	n/a	n/a	$ 60,492	$ 205,354	$ 26,128	-	$ 0.09	$ 93,374	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 136,969	$ 8,249	6%
2009	$ 100,000	$ 17,885	18%
2010	$ 100,000	$ 123,338	123%
2011 YTD (June)	$ 200,000	$ 2,174	2%
2011 YE projection	$ 200,000	$ 74,432	74%
2012	$ 200,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	6	1	17%
2010	12	3	25%
2011 YTD (June)	23	0	0%
2011 YE projection	23	14	60%
2012	5	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	29,042	6,683	23%
2010	17,973	66,979	373%
2011 YTD (June)	81,669	0	0%
2011 YE projection	81,669	57,168	70%
2012	81,938	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	232,339	66,830	29%
2010	179,732	669,798	373%
2011 YTD (June)	653,353	0	0%
2011 YE projection	653,353	457,347	70%
2012	819,390	n/a	-

CNG Standard Filing Requirement

Operations & Maintenance

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 2,643	$ 7,821	$ 5,785	$ 61,180	$ 1,374	$ 61,182	$ 33,180	
Outside Service	n/a	n/a	$ -	$ 21	$ 1,388	$ 9,000	$ 819	$ 8,619	$ 5,000	
Materials & Supplies	n/a	n/a	$ -	$ -	$ 502	$ 50	$ -	$ -	$ 50	
Incentives	n/a	n/a	$ -	$ -	$ 5,927	$ 28,970	$ 3,314	$ 57,314	$ 60,970	
Marketing	n/a	n/a	$ 570	$ 167	$ 641	$ 300	$ 164	$ 347	$ 300	
Administrative Expense	n/a	n/a	$ 7		$ -	$ 500	$ 7	$ 487	$ 500	
Total			$ 3,220	$ 8,008	$ 14,242	$ 100,000	$ 5,678	$ 127,949	$ 100,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	8,350	18,788	1,915	43,153	39,671	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	n/a	n/a	83,500	150,303	10,270	231,426	396,714	c
Annual Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	$ 1.71	$ 5.32	$ 2.97	$ 2.97	$ 2.52	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	n/a	n/a	$ 0.17	$ 0.67	$ 0.55	$ 0.55	$ 0.25	e=a/c
Total Gas Benefit	n/a	n/a	n/a	n/a	$ 86,434	$ 138,244	$ 9,446	$ 212,858	$ 237,400	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	n/a	n/a	$ 6.07	$ 1.38	$ 1.66	$ 1.66	$ 2.37	g=f/a
Customers Served	n/a	n/a	n/a	n/a	1	5	1	23	3	h
Lifetime Savings per Customer (ccf)	n/a	n/a	n/a	n/a	83,500	30,061	10,270	10,270	156,152	i=c/h
Program Cost per Customer	n/a	n/a	n/a	n/a	$ 14,242	$ 20,000	$ 5,678	$ 5,678	$ 39,361	k=a/h
Benefit per Customer	n/a	n/a	n/a	n/a	$ 86,434	$ 27,649	$ 9,446	$ 9,446	$ 93,443	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	$ 8,008	n/a	-
2010	$ 50,000	$ 14,242	28%
2011 YTD (June)	$ 100,000	$ 5,678	6%
2011 YE projection	$ 100,000	$ 127,949	128%
2012	$ 100,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	3	n/a	-
2010	6	1	17%
2011 YTD (June)	5	1	20%
2011 YE projection	5	23	451%
2012	3	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	14,540	n/a	-
2010	9,691	8350	86%
2011 YTD (June)	18,788	1,915	10%
2011 YE projection	18,788	43,153	230%
2012	39,671	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	n/a	-
2009	116,318	n/a	-
2010	96,912	83,500	86%
2011 YTD (June)	150,303	10,270	7%
2011 YE projection	150,303	231,426	154%
2012	396,714	n/a	-

SCG Standard Filing Requirement

Operations & Maintenance

Budget Projections	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Budget	2011 YTD(June)	2011 YE Projection	2012 Budget	
Labor	n/a	n/a	$ 3,175	$ 2,770	$ 2,141	$ 61,180	$ 839	$ 1,439	$ 25,180	
Outside Service	n/a	n/a	$ -	$ 21	$ 502	$ 9,000	$ 45	$ 45	$ 10,000	
Materials & Supplies	n/a	n/a	$ -	$ -	$ 618	$ 50		$ 50	$ 100	
Incentives	n/a	n/a	$ 5,538	$ -	$ 4,876	$ 28,970	$ 122,755	$ 122,755	$ 63,220	
Marketing	n/a	n/a	$ 570	$ 167	$ 252	$ 300	$ 160	$ 160	$ 500	
Administrative Expense	n/a	n/a	$ -	$ -	$ -	$ 500	$ -	$ -	$ 1,000	
Total			$ 9,283	$ 2,957	$ 8,389	$ 100,000	$ 123,799	$ 124,449	$ 100,000	a

Energy Savings Information	2006 Actuals	2007 Actuals	2008 Actuals	2009 Actuals	2010 Actuals	2011 Goals	2011 YTD (June)	2011 YE Projection	2012 Goals	
Annual Energy Savings (ccf Reduction Goal)	n/a	n/a	1,377	-	2,746	18,788	7,146	7,184	41,135	b
Lifetime Energy Savings (ccf Reduction Goal)	n/a	n/a	13,770	-	27,460	150,303	71,460	71,835	411,354	c
Annual Cost Rate ($/ccf)	n/a	n/a	$ 6.74	n/a	$ 3.06	$ 5.32	$ 17.32	$ 17.32	$ 2.43	d=a/b
Lifetime Cost Rate ($/ccf)	n/a	n/a	$ 0.67	n/a	$ 0.31	$ 0.67	$ 1.73	$ 1.73	$ 0.24	e=a/c
Total Gas Benefit	n/a	n/a	$ 12,665	n/a	$ 25,257	$ 138,244	$ 65,727	$ 66,072	$ 246,160	f
Total Gas System Benefit-Cost Ratio	n/a	n/a	$ 1.36	n/a	$ 3.01	$ 1.38	$ 0.53	$ 0.53	$ 2.46	g=f/a
Customers Served	n/a	n/a	1	n/a	1	5	1	1	3	h
Lifetime Savings per Customer (ccf)	n/a	n/a	13,770	n/a	27,460	30,061	71,460	71,460	156,152	i=c/h
Program Cost per Customer	n/a	n/a	$ 9,283	n/a	$ 8,389	$ 20,000	$ 123,799	$ 123,799	$ 37,960	k=a/h
Benefit per Customer	n/a	n/a	$ 12,665	n/a	$ 25,257	$ 27,649	$ 65,727	$ 65,727	$ 93,443	l=f/h

Program Costs

Year	Budget	Actual	% of Budget
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	$ 82,146	9,283	11%
2009	$ 100,000	$ 2,957	3%
2010	$ 50,000	$ 8,389	17%
2011 YTD (June)	$ 100,000	$ 123,799	124%
2011 YE projection	$ 100,000	$ 124,449	124%
2012	$ 100,000	n/a	-

Goal - Participation/Units

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	1	-
2009	3	n/a	-
2010	6	1	17%
2011 YTD (June)	5	1	20%
2011 YE projection	5	1	20%
2012	3	n/a	-

Goal - Annual ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	1,377	-
2009	41,135	0	0%
2010	9,691	2,746	28%
2011 YTD (June)	18,788	7,146	38%
2011 YE projection	18,788	7,184	38%
2012	41,135	n/a	-

Goal - Lifetime ccf savings

Year	Goal	Actual	% of Goal
2006	n/a	n/a	-
2007	n/a	n/a	-
2008	n/a	13,770	-
2009	116,318	0	0%
2010	96,912	27,460	28%
2011 YTD (June)	150,303	71,460	48%
2011 YE projection	150,303	71,835	48%
2012	411,354	n/a	-

Process Reengineering for Increased Manufacturing Efficiency ("PRIME") (Electric)

Objective:

The objective of the PRIME program is to teach manufacturers how to implement "Lean Manufacturing" techniques, which result in the more efficient use of energy as well as reduced inventory and delivery times, improved quality and increased production capacity. Utilizing these techniques, manufacturers are able to produce more with existing resources by eliminating non-value-added activities and waste, reducing energy consumption per product and aligning production to meet actual customer demand.

Target Market:

The PRIME program specifically targets industrial customers of all sizes that are currently using traditional manufacturing techniques and are interested in fostering a "Lean" culture of continuous improvement. The program is available to all manufacturing customers, but is best suited to those with a minimum of 500,000 kWh/year of electric usage.

Program Description:

The PRIME program moves manufacturers away from traditional batch-based production toward production aligned with customer demand or "pull". A company that employs Lean principles is focused on excellence through "Kaizen" (continuous improvement) and the relentless elimination of waste. In addition, lean manufacturing results in the more efficient use of energy per product produced by reducing non-manufacturing related electricity consumption and by reducing losses in manufacturing equipment consumption.

The PRIME program offers eligible customers the opportunity to participate in up to four separate three-and-a-half day, team-based Kaizen events at their facility which teach the fundamentals of lean manufacturing and facilitates the implementation of changes to a process in order to eliminate waste and improve efficiency. The first two events are at no cost to the customer. The third and fourth events require the customer to contribute 50 percent of the cost. Events thereafter are fully funded by the customer.

Each event involves the assembly of a Kaizen team of participants from various departments within the company to address specific areas for improvement. Vendors under contract with the Electric Companies (EDCs) are responsible for working with the customer to identify and quantify the projected productivity improvement and corresponding savings potential and to provide coaching and training to the team. Projects chosen are selected on the basis of potential electric energy savings and overall impact (improvement) to specific processes and/or product lines.

Each event begins with roughly a half-day of team training on Lean Manufacturing principles and techniques, followed by three days of implementation of the selected improvement project. There is

also a follow-up review conducted approximately 90 days after the conclusion of the event to determine the final improvements and to assure that the improvements persist. The EDCs' Program Administrator attends this follow-up to review the process improvements and to conduct a brief walkthrough of the plant to identify other potential energy efficiency opportunities.

Marketing Strategy:

Marketing efforts are conducted predominantly by program vendors but also by utility staff, who identify targets through customer knowledge. Program vendors are selected by means of a Request for Proposal ("RFP") involving a bid and qualification process. Vendors for the 2011 – 2012 program years were selected during the last quarter of 2010 through a competitive RFP process. Selected vendors agree to perform the required services at a standard price determined by this process. These services include marketing and promotion of the program to potential participants, obtaining signed contracts between the vendor and customer, and providing an estimate of energy savings to the Electric Companies' Program Administrator in order to assess the cost-effectiveness of the project to meet program parameters. The EDCs provide the vendors with the customer's electric usage information for savings calculations.

The Electric Companies will augment enrollment with strategies that may include:

- program promotion to customers via in-person meetings
- writing and distribution of case studies (also referred to as Success Stories or Testimonials) to various relevant marketing channels;
- targeted mailings to customers (print and e-mail) directing them to the two Company web sites and CTEnergyinfo.com, and;
- articles and notices posted in electronic Electric Companies' newsletters.

Incentive Strategy:

While there are no incentives paid directly to the customer, the cost of the vendor's services is paid by the Electric Companies in the manner previously described.

Goals:

Refer to Standard Filing Requirements for program goals.

New Program Issues:

Given that PRIME participants learn the value of continuous process improvement, they will be a target customer segment for participating in the BSC being developed and conducted under the O&M program.

For the 2011-2012 the 3.5 day event vendor cost increased to $7000 per event causing the qualifying $$/kWh cost rate to be reduced to a more aggressive level. Each project will need to possess greater productivity improvements therefore greater energy savings. In order to potentially increase the cost-effectiveness of the program, the Companies are exploring the value of 5 day events.

CL&P Issues:

UI Program Issues:

UI requires all of its vendors (their employees or sub – contractors) to go through a third party screening and verification process before being able to work in its service territory. This complex policy created significant obstacles for the PRIME initiative in 2011 due to the small dollar value of the vendor contracts.

CL&P Standard Filing Requirement

Prime

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget	2013 Budget
Labor							
NU Labor	$ 27	$ 37	$ 60	$ 16	$ 56	$ 45	$ 45
Contractor Staff	$ -	$ 0	$ -	$ 0	$ -	$ 2	$ 2
Total Labor	$ 27	$ 37	$ 60	$ 17	$ 56	$ 46	$ 46
Materials & Supplies	$ 0	$ 0	$ 2	$ -	$ 2	$ 2	$ 2
Outside Services	$ -	$ 28	$ 10	$ (8)	$ 9	$ 10	$ 10
Incentives	$ 365	$ 409	$ 383	$ 208	$ 360	$ 394	$ 394
Marketing	$ 1	$ 0	$ 20	$ 0	$ 19	$ 20	$ 20
Administrative Expenses	$ 1	$ 1	$ 10	$ 1	$ 9	$ 10	$ 10
Other	$ -	$ 0	$ 3	$ 0	$ 3	$ 3	$ 3
Total	$ 394	$ 477	$ 488	$ 217	$ 458	$ 485	$ 485

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	-
Annual Energy Savings (KWh Reduction Goal)	1,895,775
Lifetime Energy Savings (kWh Reduction Goal)	9,479,141
Annual Cost Rate ($/kWh)	$ 0.256
Lifetime Cost Rate ($/kWh)	$ 0.051
Electric b/c Ratio	1.66
Total Resource b/c Ratio	29.46

CL&P Program Notes - Prime

Budget /FTE

0.3 FTE for Program Administration

Goal

Customers	50
Demand Savings (kW Reduction Goal)	0
Lifetime Energy Savings (kWh Reduction Goal)	9,479,141

Cost/kWh (Cost/Unit)

$/Annualized kW	n/a
$/Lifetime kWh	$ 0.051

Goal Setting Methodology

The 2012 planning model is based on 2010 actual results.
Savings were adjusted based on new incentive

Metric Changes

None

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Appendix: C&I Incentive Tables

2011 Project Caps and Incentive Levels for CL&P

Effective 3/28/2011

Connecticut Light & Power
The Northeast Utilities System

CONNECTICUT ENERGY EFFICIENCY FUND

RETROFIT MEASURES

Retrofit Measures	Energy Opportunities (EO) & Small Business Energy Advantage (SBEA)	Operations & Maintenance (O&M) (Includes Retro Commissioning where applicable)
Cumulative Cap per Federal Tax ID	$400,000	$400,000
Program Caps per metered site	$100,000	$100,000
Municipal Finance Cap (project /cumulative total per municipality)	$100,000 / $500,000	N/A
Lighting Measures		
Interior & Exterior Lighting Measures (the lesser of)		
% of installed cost	30%	N/A
Measure Cap (**greater of**)	$0.20 / kWh **OR** $700 per summer peak kW	N/A
High Performance Lighting - LED, Daylighting or Induction Lighting Measures; Advanced Lighting Controls (the lesser of)		
% of installed cost	30%	N/A
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW	N/A
Express Lighting Rebate (includes LEDs) Refer to Website	$10 - $50 / fixture	N/A
Non-Lighting Measures		
Custom Measures (the lesser of)		
% of installed cost	30%	30%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW	$0.25 / kWh **OR** $700 per summer peak kW
Prescriptive Values - if applicable	$$/unit	$$/unit
EMS System (the lesser of)		
% of installed cost	30%	30%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW	$0.25 / kWh **OR** $700 per summer peak kW
cap per point	$500 / pt	$500 / pt
EMS incentives will be prorated based on energy savings by fuel		
Comprehensive Project Initiative		
Project must contain at least 2 End Uses (Heating, Cooling, Lighting, Process, Refrigeration, Motors and EMS)		
No one End Use can exceed	85% of the energy savings values using the caps below	85% of the energy savings values using the caps below
% of installed cost	35%	35%
Comprehensive 'Project' Cap for all measures (**greater of**)	$0.20 / kWh **OR** $800 per summer peak kW	$0.20 / kWh **OR** $800 per summer peak kW
buydown	3 yr. payback	3 yr. payback
Other Prescriptive Caps to be evaluated against the energy & demand caps above (the lesser of):		
Pool Covers - automated	$12 / sf	N/A
Window Film	$2.00 /sf	$2.00 /sf
PC Network Controls	$20 / PC controlled	$20 / PC controlled
PRIME (Events per customer over 2 years)		
Events 1 & 2	N/A	100%
Events 3 & 4	N/A	50%
Retro Commissioning will use the same Measure Caps as EO and O&M		
Scoping Study	N/A	$1,000
Investigative Study	N/A	50%
Custom Non-Lighting Measures (the lesser of)		
% of installed cost	N/A	30%
Measure Cap (**greater of**)	N/A	$0.25 / kWh **OR** $700 per summer peak kW

NOTES:

1. All references to kWh savings shall refer to annual savings
2. Electric Distribution Company shall have final determination of Annual Energy Savings
3. Summer Peak kW reduction shall be coincident with: Mon - Fri, non-Holiday from 1pm -5 pm, June-July-August

2011 Project Caps and Incentive Levels for CL&P

Effective 2/1/2011

Connecticut Light & Power — The Northeast Utilities System

CONNECTICUT ENERGY EFFICIENCY FUND

LOST OPPORTUNITY MEASURES

Lost Opportunity Measures	Energy Conscious Blueprint
Cumulative Cap per Federal Tax ID	$750,000
Program Caps per metered site	$300,000
Municipal Finance Cap (project /cumulative total per municipality)	N/A
Gas Projects requiring DPUC Approval	≥ $100,000
Lighting Measures	
Lighting Measures	
Lighting Power Density - Tier 1: (>10% above Code) & Tier 2: (> 30% above Code)	$0.15/sf & $0.50 /sf
Fixture Cap	$50/Fixture
Occupancy Sensors (beyond Code requirements for Lighting Controls)	$20/fixture controlled
Custom - Lighting; Advanced Lighting Controls, etc. (the lesser of)	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.50 / kWh **OR** $1,100 per peak kW
Non- Lighting Measures	
HVAC	
Unitary / splits / ductless units (units ≤ 30 tons) Refer to Web Site -Rebate	$50 to $120 per ton
Unitary / splits / ductless units (> 30 tons)	custom
Chillers & VFDs	custom
Air Compressors (lesser of)	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.30 / kWh **OR** $1,000 per summer peak kW
Prescriptive	
0 - 5 hp	$0
≥ 5 hp < 40 hp	$310
≥ 40hp < 50 hp	$240
≥ 50hp ≤ 100 hp	$205
> 100 hp	See Custom - Process Equip
Custom - Process Equipment New or Replacement (the lesser of) See Note 4	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.50 / kWh **OR** $1,100 per summer peak kW
buydown	1.5 yr. payback
Custom - Equipment Replacement non-process (the lesser of)	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.50 / kWh **OR** $1,100 per summer peak kW
Custom - New Construction (non-Whole Building Performance)	
Incremental Cost	95%
Measure Cap (**greater of**)	$0.35 / kWh **OR** $1,100 per summer peak kW
Whole Building Performance	
Model Subsidy	
Base or "Code" building model (paid when received)	$1,000
High Performance building model (paid upon final construction)	$5,000
Building / System Compliance (Installation)	
Whole Building Incentive (% better than code)	10% - $0.15 / sf
Note: Incentive prorated for fossil fuel based on modeled $savings	11% -15% - $0.30 / sf
	16% -20% - $0.60 / sf
	21% - 25% - $1.00 / sf
	26% - 29% - $1.50 / sf
	> 30% - $2.00 / sf
Certification Bonus	
LEED Silver or 2 Green Globes	$5,000
LEED Gold or 3 Green Globes	$10,000
LEED Platnium or 4 Green Globes	$15,000
Enhanced Commissioning	TBD
Other Prescriptive Caps to be evaluated against the energy caps above (the lesser of):	
Cool Roofs	$0.20 /sf
EMS	$500 / point
High Performance Glazing	$2.00 / sf

NOTES:

1. All refernces to kWh savings shall refer to annual savings
2. Electric Distribution Company shall have final determination of Annual Energy Savings
3. Summer Peak kW reduction shall be coincident with: Mon - Fri, non-Holiday from 1pm -5 pm, June-July-August

4. Process definition: Any measure that saves energy related to producing a product. Typical examples include, but are not limited to, compressed air systems, plastic injection molding machines, process chilled water systems, making ice-cream, commercial milk processing, water- and waste-water treatment plants.

2011 Project Caps and Incentive Levels

Effective 6/20/2011

GAS MEASURES

Measures	Energy Opportunities (EO)	Operations & Maintenance (O&M) (includes RetroCx where applicable)	Energy Conscious Blueprint
Cumulative Cap per Federal Tax ID	N/A	N/A	N/A
Program Caps per metered site	N/A	N/A	N/A
Municipal Finance Cap (project /cumulative total per municipality)	N/A	N/A	N/A
Gas Projects requiring DPUC Approval	≥ $100,000	≥ $100,000	≥ $100,000
Retrofit			
Gas Measures - Space Heating (lesser of)			
% of installed Cost	40% (30% SCG only)	40% (30% SCG only)	N/A
Measure Cap	$3.50 / CCF	$3.50 / CCF	N/A
Prescriptive Values - if applicable	$$/unit	$$/unit	N/A
Gas Measures - Non-Space Heating (lesser of)			
% of installed Cost	40% (30% SCG only)	40% (30% SCG only)	N/A
Measure Cap	$3.50 / CCF	$3.50 / CCF	N/A
Prescriptive Values - if applicable	$$/unit	$$/unit	N/A
Lost Opportunity			
Custom - Process Equipment New or Replacement (the lesser of). See Note 4			
Incremental Cost	N/A	N/A	75%
Measure Cap	N/A	N/A	$6.00 CCF
buydown	N/A	N/A	1.5 yr. payback
Custom - Non Process Equipment New or Replacement (the lesser of)			
Incremental Cost	N/A	N/A	75%
Measure Cap	N/A	N/A	$6.00 CCF
Gas - New Construction (non whole Builiding Performance)			
Incremental Cost	N/A	N/A	95%
Measure Cap - space heating	N/A	N/A	$6.00 CCF
Measure Cap - non-space heating	N/A	N/A	$5.00 CCF
Gas Food Service Fixed Rebates			
Gas Energy Star ® Fryers	$750 / unit	N/A	$750 / unit
Gas Energy Star ® Steamers	$750 / unit	N/A	$750 / unit
Gas Energy Star ® Convection Ovens	$500 / unit	N/A	$500 / unit
Other Prescriptive Caps to be evaluated against the energy & demand caps above (the lesser of):			
Pool Covers (automated)	$12 / sf	N/A	N/A
Window Film	$2.00 /sf	N/A	N/A
EMS systems	$500 / pt	N/A	$500 / pt
High Performance Glazing	N/A	N/A	$2.00 / sf
Gas Boilers (non-condensing)	N/A	N/A	$4.00 / input MBH
Gas Boilers (condensing)	N/A	N/A	$8.00 / input MBH
Gas Storage Water Heaters (Thermal Eff. ≥ 90%	N/A	N/A	Varies by Input BTU
Gas IR Heater fixed Rebates (low & high intensity)	N/A	N/A	Varies by Input BTU (see below)
Up to 50,000 BTU /hr	N/A	N/A	$500/unit
≥ 50,000 BTU/hr up to 150,000 BTU/hr	N/A	N/A	$550/unit
≥ 150,000 BTU/hr up to 175,000 BTU/hr	N/A	N/A	$650/unit
≥ 175,000 BTU/hr	N/A	N/A	$850/unit

NOTES:

1. All references to CCF savings shall refer to annual savings
2. Gas Distribution Company shall have final determination of Annual Energy Savings
3. Gas measures integrated into an Electric Comprehensive Project may be eligible for a 10% adder applied to the gas program incentive.
4. Process definition: Any measure that saves energy related to producing a product. Typical examples include, but are not limited to, heat treating, process heating & drying, cleaning & sterilizing, commercial milk processing.

2011 Project Caps & Incentive Structure for UI (Effective 6/20/2011)

Retrofit Measures	Energy Opportunities (EO)	Small Business Energy Advantage (SBEA)	Operations & Maintenance (O&M) (includes RetroCx where applicable)
Cumulative Cap per Federal Tax ID	$750,000	$750,000	$750,000
Program Caps per metered site	$100,000	$150,000	$150,000
Municipal Finance Cap (project /cumulative total per municipality)	$100,000 / $400,000	$100,000 / $400,000	N/A
Lighting Measures			
Interior & Exterior Lighting Measures (the lesser of)			
% of installed cost	30%	40%	N/A
Measure Cap (**greater of**)	$0.20 / kWh **OR** $700 per summer peak kW	$0.20 / kWh **OR** $700 per summer peak kW	N/A
High Performance Lighting - LED, Daylighting or Induction Lighting Measures; Advanced Lighting Controls (the lesser of)			
% of installed cost	30%	40%	N/A
Measure Cap (**greater of**)	$0.20 / kWh **OR** $700 per summer peak kW	$0.25 / kWh **OR** $700 per summer peak kW	N/A
Express Lighting Rebate (includes LEDs) Refer to Website	$10 - $50 / fixture	$10 - $50 / fixture	N/A
Non-Lighting Measures			
Custom Measures (the lesser of)			
% of installed cost	30%	40%	40%
Measure Cap (**greater of**)	$0.20 / kWh **OR** $700 per summer peak kW	$0.25 / kWh **OR** $700 per summer peak kW	$0.25 / kWh OR $700 per summer peak kW
Prescriptive Values - if applicable	$$/unit	$$/unit	$$/unit
EMS System (the lesser of)			
% of installed cost	30%	40%	40%
Measure Cap (**greater of**)	$0.20 / kWh **OR** $700 per summer peak kW	$0.25 / kWh **OR** $700 per summer peak kW	$0.25 / kWh OR $700 per summer peak kW
cap per point	$500 / pt	$500 / pt	$500 / pt
EMS incentives will be prorated based on energy savings by fuel			
Comprehensive Project Initiative			
Project must contain at least 2 End Uses (Heating, Cooling, Lighting, Process, Refrigeration, Motors and EMS)			
No one End Use can exceed	85% of the energy savings values using the caps below	85% of the energy savings values using the caps below	85% of the energy savings values using the caps below
% of installed cost	35%	50%	50%
Comprehensive 'Project' Cap for all measures (**greater of**)	$0.20 / kWh **OR** $800 per summer peak kW	$0.35 / kWh **OR** $1,000 per summer peak kW	$0.35 / kWh **OR** $1,000 per summer peak kW
buydown	3 yr. payback	2 yr. payback	2 yr. payback
Other Prescriptive Caps to be evaluated against the energy & demand caps above (the lesser of):			
Pool Covers - automated	$12 / sf	$12 / sf	N/A
Window Film	$2.00 /sf	$2.00 /sf	$2.00 /sf
PC Network Controls	$20 / PC controlled	$20 / PC controlled	$20 / PC controlled
PRIME (Events per customer over 2 years)			
Events 1 & 2	N/A	N/A	100%
Events 3 & 4	N/A	N/A	50%
RetroCx will use the same Measure Caps as EO and O&M			
Scoping Study	N/A	N/A	$1,000
Investigative Study	N/A	N/A	50%
Custom Non-Lighting Measures (the lesser of)			
% of installed cost	N/A	N/A	40%
Measure Cap (**greater of**)	N/A	N/A	$0.25 / kWh **OR** $700 per summer peak kW

NOTES:
All references to kWh savings shall refer to annual savings
Electric Distribution Company shall have final determination of Annual Energy Savings
Summer Peak kW reduction shall be coincident with: Mon - Fri, non-Holiday from 1pm -5 pm, June-July-August

2011 Project Caps & Incentive Structure for UI (Effective 1/13/2011)

Lost Opportunity Measures	Energy Conscious Blueprint
Cumulative Cap per Federal Tax ID	$750,000
Program Caps per metered site	$150,000
Municipal Finance Cap (project /cumulative total per municipality)	N/A
Lighting Measures	
Lighting Measures	
Lighting Power Density - Tier 1: (>10% above Code) & Tier 2: (> 30% above Code)	$0.15/sf & $0.50 /sf
Fixture Cap	$50/Fixture
Occupancy Sensors (beyond Code requirements for Lighting Controls)	$20/fixture controlled
Custom - Lighting; Advanced Lighting Controls, etc. (the lesser of)	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per peak kW
Non- Lighting Measures	
HVAC	
Unitary / splits / ductless units (units ≤ 30 tons) Refer to Web Site -Rebate	$50 to $120 per ton
Unitary / splits / ductless units (> 30 tons)	custom
Chillers & VFDs	custom
Air Compressors (lesser of)	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW
Prescriptive	
0 - 5 hp	$0
≥ 5 hp < 40 hp	$310
≥ 40hp < 50 hp	$240
≥ 50hp ≤ 100 hp	$205
≥ 100 hp	See Custom - Process Equip
Custom - Process Equipment New or Replacement (the lesser of) See Note 4	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW
buydown	1.5 yr. payback
Custom - Equipment Replacement non-process (the lesser of)	
Incremental Cost	75%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW
Custom - New Construction (non-Whole Building Performance)	
Incremental Cost	95%
Measure Cap (**greater of**)	$0.25 / kWh **OR** $700 per summer peak kW
Whole Building Performance	
Model Subsidy	
Base or "Code" building model (paid when received)	$1,000
High Performance building model (pd upon final construction)	$5,000
Building / System Compliance (Installation)	
Whole Building Incentive (% better than code)	10% - $0.15 / sf
Note: Incentive prorated for fossil fuel based on modeled $savings	11% -15% - $0.30 / sf
	16% -20% - $0.60 / sf
	21% - 25% - $1.00 / sf
	26% - 29% - $1.50 / sf
	> 30% - $2.00 / sf
Certification Bonus	
LEED Silver / 2 Green Globes	$5,000
LEED Gold / 3 Green Globes	$10,000
LEED Platnium / 4 Green Globes	$15,000
Enhanced Commissioning	TBD
Other Prescriptive Caps to be evaluated against the energy caps above (the lesser of):	
Cool Roofs	$0.20 /sf
EMS	$500 / point
High Performance Glazing	$2.00 / sf

NOTES:

1. All refernces to kWh savings shall refer to annual savings
2. Electric Distribution Company shall have final determination of Annual Energy Savings
3. Summer Peak kW reduction shall be coincident with: Mon - Fri, non-Holiday from 1pm -5 pm, June-July-August
4. Process definition: Any measure that saves energy related to producing a product. Typical examples include, but are not limited to, compressed air systems, plastic injection molding machines, process chilled water systems, making ice-cream, commercial milk processing, water- and waste-water treatment plants.

CHAPTER FOUR: EDUCATION and OUTREACH

Overview

Advance the Efficient Use of Energy.
Mitigate Environmental Impacts of Energy Generation.
Promote Economic Development & Provide Energy Security.

These three main objectives of the Energy Efficiency Fund are combined with a mandate to educate and inform Connecticut's businesses, municipalities, residents and schoolchildren on the importance of using energy efficiently. The Energy Efficiency Fund and The Companies meet and surpass this educational mandate through a variety of programs including school-based programs (kindergarten through college), public forums, technical training and seminars, educational exhibits and centers, trade shows and community and grassroots outreach.

Connecticut's youth need access to energy curriculum that instills in them an energy-efficient ethic. The state's teachers require inquiry-based professional development regarding efficient and clean energy technologies. Businesses and facility managers demand the training and technical expertise to take control of energy consumption and rising energy costs and concerned Connecticut citizens clamor for the knowledge and tools needed to combat global warming. And municipalities, clean energy task forces and grassroots groups—environmental and faith-based—need guidance on how to reduce energy consumption in their community and to receive rewards for increasing Energy Efficiency Fund program participation.

Connecticut's energy education programs and initiatives are necessary to provide individuals with the knowledge, skills and power needed to use energy efficiently. Connecticut Energy Efficiency Fund's educational programs are diverse in audience and delivery but share one common goal—educate, empower and energize the state's businesses, municipalities, residents and school children to use energy wisely.

eesmarts™

eesmarts is an energy efficiency and clean, renewable learning initiative. Created in 2002, the program's goal is to facilitate students' understanding of math, science and technology related to energy conservation, renewable energy resources and electricity in order to create an energy-efficient ethic among Connecticut's school-age students. ***eesmarts*** offers teacher training workshops, curriculum materials, essay contest, sponsors sustainable resources category at the CT Science Fair, lights for learning fundraiser, on-site program, outreach and educational resources.

In 2012, the ***eesmarts*** program will continue to focus on conducting educator training focused on science concepts related to energy, energy-efficient technologies and energy conservation. Additionally, ***eesmarts*** will continue to reach out directly to schoolchildren through the eeEvents

initiative, including in-classroom activities, book readings, Earth Day presentations, Girl Scouts Forums and various other school assemblies.

SmartLiving™ Center and Museum Partnerships

The objective of both the SmartLiving Center and Museum Partnerships program is to educate Connecticut residents about the importance of energy efficiency through exhibits at educational centers and partnerships with museums.

Connecticut Science Center

In 2012, the Museum Partnerships program will again work with the Connecticut Science Center in Hartford, Conn. to upgrade the existing Energy City Gallery exhibits and Climate Chan Change Theater. This upgrade will ensure the content reflects the latest technological advancements and scientific knowledge associated with clean and efficient energy technologies. Funding will include upgrades to the Climate Change Theater, the "In Your Community" exhibit, and the establishment of an "Energy Review" panel, including scientists from the National Renewable Energy Laboratory, to complete a technical review of the Energy City Gallery exhibits and work with the Connecticut Science Center's exhibit team to develop recommendations for making upgrades to the exhibits.

SmartLiving Center

UI will continue to lease the SmartLiving Center property at 297 Boston Post Road, Orange for its continued operation until March 31, 2013. Connecticut customers would benefit from the continued expansion of SmartLiving Center exhibits - in particular, a remodeled Center tailored to further engage the benefits of the Fund's residential programs, including HES, HVAC, and Heat Pump Water Heaters, would create an experience similar to walking through a home using tools such as a blower door test, duct sealing, cross sections of insulation, efficient windows, and caulking showing residents how to save energy.

Clean Energy Communities (formerly named eeCommunities)

The purpose of the Clean Energy Communities program is to develop a sustainable and energy-efficiency ethic with Connecticut's residents, businesses and municipalities. The program encourages communities in Connecticut's towns and cities to invest in energy efficiency in buildings – schools, town halls, libraries, businesses, homes and apartments.

In 2012, the Energy Efficiency Fund and the Clean Energy Finance & Investment Authority will formally launch the new Clean Energy Communities program. This program will complete the energy puzzle for communities by connecting the two separate entities' objectives into one: promoting clean and efficient energy use in Connecticut's towns and cities. With this new program, program administrators will track municipalities' program participation rates (residential, business and municipal) and reward them for

their participation and reduction in energy consumption. A goal of the Energy Efficiency Track of the Clean Energy Communities program will be to reduce municipal building energy consumption by 20 percent by 2015.

Additionally, in 2012, the Energy Efficiency Fund will work with community and grassroots organizations to promote program participation. The Energy Efficiency Fund will directly fund and support grassroots efforts by the following groups: the Interreligious Eco-Justice Network's Cool Congregations Challenge, the Northwest Conservation District and its 34 towns, and the Spanish American Merchants Association. The communities program will evaluate funding other organizations' efforts on a case-by-case basis.

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Clean Energy Communities Program (Electric)

Objective:

The purpose of the Clean Energy Communities program is to develop a clean and energy-efficiency ethic with Connecticut's residents, businesses and municipalities. The program encourages communities in Connecticut's towns and cities to invest in energy efficiency and clean, renewable energy sources in buildings—schools, town halls, libraries, businesses, homes and apartments.

The objective of this marketing and educational outreach program is to utilize locally organized efforts to help advance the message of energy efficiency and to raise awareness of and promote Energy Efficiency Fund programs. The Clean Energy Communities program's Energy Efficiency Track is designed to promote participation in all of the Energy Efficiency Fund's residential, business and municipal programs through technical, financial, educational and marketing assistance.

In 2011, the Energy Efficiency Fund began collaborating with the Connecticut Clean Energy Finance & Investment Authority to create an umbrella communities initiative. This initiative –the new Clean Energy Communities Program—will jointly promote Connecticut's efficiency and renewable programs to residents, businesses and municipalities. The impact of this joint collaboration will result in:

Alignment with national/state policies promoting both energy efficiency and renewable energy sources:

- Promotion of holistic energy strategies
- Utilization of existing infrastructure
- Avoidance of duplicate efforts
- Elimination of confusion among communities
- Conservation of ratepayer dollars
- Leveraged funding
- Enhanced program performance

Target Market:

This program educates and provides outreach to residential, business and municipal energy consumers through local community groups and organizations that promote energy efficiency, clean energy and environmental advocacy. Clean Energy Communities Program Partners include: Clean Energy Task Forces, Green/Sustainable Teams, Green Towns, Spanish American Merchants Association, Interreligious Environmental Justice Network, Northwest Conservation District and Connecticut Regional Planning Organizations. The program incorporates support from municipal officials, town facility managers, and boards of education.

Program Description:

In 2012, the Clean Energy Communities program will continue to work with its Program Partners statewide to encourage participation in Energy Efficiency Fund programs. The 2012 program structure consists of three steps that include the Clean Energy Fund's goals and incentive points:

Step 1: Make the Municipal Energy-Saving Pledge

This step is required and includes a pledge by a municipal official to reduce municipal energy consumption 20% by 2015. Municipalities will be asked to reduce their consumption in 5 percent increments by the end of 2012, 2013, 2014 and 2015. Part of the pledge includes the creation of a Municipal Action Plan (MAP) detailing planned energy-saving and clean, renewable energy measures. Municipalities will be asked to benchmark town buildings utilizing EPA Portfolio Manager or other utility-approved benchmarking software. Training and technical assistance will be offered through the utilities and entities such as the Northwest Conservation District. Though this is a key Step for the 2012 program, municipalities will not be penalized or restricted from receiving Bright Idea Grants (see Step 3b) in order for program administrators to work out tracking and reporting issues.

Step 2: Make the Municipal Clean Energy Pledge

This step is required and includes a pledge from the town government to obtain 30 percent of the electricity used at municipal facilities from clean energy sources by 2015 with minimum purchase

requirements. Annual reporting is required. The Clean Energy Finance & Investment Authority tracks and funds Step 2.

Municipalities may choose Step 3a, Step 3b or both.

Step 3a: Earn Clean Energy Points

Communities earn points for every CT CleanEnergyOptions sign up, independent RECs from residential and commercial sales and clean energy systems funded by the Clean Energy Finance & Investment Authority, as well as independently funded systems. **100 sign ups = 100 points = 1 kW solar panel.** The Clean Energy Finance & Investment Authority tracks and funds Step 3a.

Step 3b: Earn Energy Efficiency Points

Communities earn points for Energy Efficiency Fund program sign ups and rebates used as outlined below. **100 points = Bright Ideas Grant.** These grants are to be used for energy efficiency or non-renewable carbon reducing projects. The program will offer an online catalog of suggested Bright Ideas. Some approved projects will include: LED solar-powered street/parking lights, Electric Vehicle car charging stations, smart power strips purchased for work stations/computer labs, LED/CFL lighting retrofits, energy consulting services, etc. The Energy Efficiency Fund tracks and funds Step 3b.

Bright Ideas Grants will range from $5,000 to $15,000. The following 26 towns will be eligible for $15,000 grants due to their population size: Bridgeport, Bristol, Danbury, East Hartford, Enfield, Fairfield, Greenwich, Hamden, Hartford, Manchester, Meriden, Middletown, Milford, New Britain, New Haven, Norwalk, Norwich, Shelton, Southington, Stamford, Stratford, Torrington, Wallingford, Waterbury, West Hartford and West Haven.

In order to earn the initial Bright Ideas Grant, the following milestones must be reached:

1. *Residential Program Participation:* 10 percent of households participate in Residential New Construction, Multi-Family and Home Energy Solutions (both core services and HES-IE included). This earns the community 60 points toward their first 100 points.

Communities can interchangeably use the other program participation rates listed below to attain the additional 40 points:

2. *Residential Rebates/Home Performance*: Households who utilize Home Energy Solutions rebates (appliances and insulation), HVAC rebates or hot water rebates or participate in the Home Energy Solutions – Home Performance program. For every 1 percent of residents that utilize a rebate or participate in Home Energy Solutions – Home Performance, the community earns 8 points.
3. Commercial, Industrial & Municipal Program Participation: Community can earn points for town's commercial, industrial and municipal accounts who participate in Small Business Energy Advantage, Energy Opportunities, Energy Conscious Blueprint, Operations & Maintenance,

PRIME or the Business Sustainability Challenge. For every 1 percent of businesses and municipal buildings that participate, the community earns 4 points.

4. Special Initiatives: Municipality can earn points for special energy conservation and energy efficiency projects, such as conservation challenges, behavioral-based campaigns (ex., Turn Off Lights!, Energy Awareness Month and Earth Day events). These special initiatives can be reviewed by program administrators on a case-by-case basis. *Only* programs that support energy conservation and energy efficiency will be considered. Municipality can earn up to 10 points in Special Incentives points.

Please note that the Energy Efficiency Track will award each municipality points retroactive to January 1, 2010. All households, businesses and municipal buildings that have participated in Energy Efficiency Fund programs since then will be included in tracking program participation rates. Additional Bright Ideas Grants may be earned once the initial milestones and grant have been achieved.

2012 Major Initiatives with Communities, Vendors and Stakeholder Partners

Clean Energy Communities Resources

- Online, downloadable Energy Efficiency Fund Program Guidebook & Community Toolkit;
- A website that will feature;
    - an interactive map of Connecticut and its individual municipalities;
    - information showcasing the progress of each municipality toward Bright Ideas Grants and solar panels;
    - whether the municipality has signed up for the EPA Community Energy Challenge;
    - whether the community has energy benchmarked its municipal buildings;
    - the municipal contact for the utility account;
    - a list of Energy Efficiency Fund incentives for municipal buildings;
    - Links to communities' clean energy task force web sites/calendar of events;
    - a general overview of energy conservation;
    - tips on promoting programs, blank sign-up forms and a link to request Community Tool Kits;
    - information about the CFL fundraising program and participating schools, non-profits and organizations;
    - a link to the www.ctenergyinfo.com event calendar;
    - a link to the EPA's Community Energy Challenge web site and its free webinars; and
    - a link to the Companies social networking communities Facebook and Twitter.

Business Outreach

The 2012 Clean Energy Communities program will work with local chambers of commerce, utility account executives or account managers, trade associations, farmers' markets and cultural entities to promote business, municipal and large commercial Energy Efficiency Fund programs within its territory. Such assistance will include speaking engagements and promotion of the Clean Energy Communities program.

Resources to Increase Outreach

In 2012, the Clean Energy Communities program will attempt to involve additional utility resources to increase outreach. These resources include account executives and employees involved in community relations efforts. Implanting resources in town activities will offer the program the benefit of a credible, trusted source in most town Energy Task Forces, Rotary Clubs, etc. This group liaison would be expected to spread awareness of our programs to the group and encourage use of our resources. The group would be expected to utilize this source to gain access to information and Clean Energy Communities resources.

2012 Outreach Initiatives

Clean Energy Communities Leadership Series

The feasibility of conducting a series of Leadership Series forums across the state on best practices for promoting Energy Efficiency Fund programs, energy conservation and energy-efficient technologies will be researched. These forums and the ideas they produce would be made available on the Clean Energy Communities web site.

Student Clean Energy Communities Ambassadors

The 2012 Clean Energy Communities program will research the possibility of working with students in elementary, middle and high schools across the state, as well as colleges and universities, to develop and train Student Clean Energy Communities Ambassadors.

Such training and development would include a stint at a Student Clean Energy Communities Ambassador Institute, similar to the ***eesmarts*** program's Summer Institute. The institute would be conducted for elementary, middle and high school participants and would include hands-on training in conducting a school energy audit and school conservation challenges. The Institute would also review the basics of how to promote other school sustainability initiatives (e.g., recycling, riding the bus, CFL fundraisers, school community gardens, etc.). Clean Energy Communities program would partner with non-profit, grassroots organizations to conduct these sessions.

A similar Student Clean Energy Communities Ambassador Institute will be investigated for undergraduate and graduate-level students enrolled at Connecticut universities.

Home Energy Reports Pilot

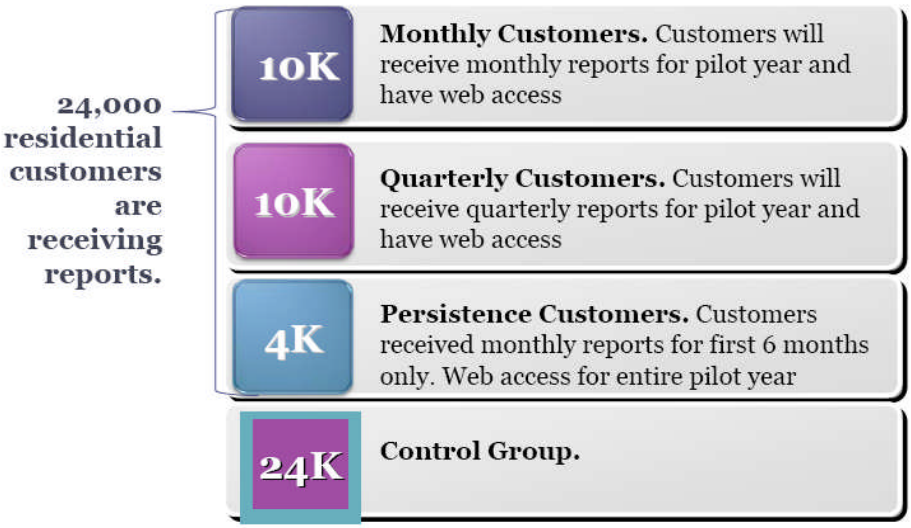
As directed by PURA, the Companies kicked-off their information-based energy conservation pilot in September of 2010 to gauge customer behavior/engagement when a customer receives a Home Energy Report, which compares their energy usage with "virtual neighbors". These virtual neighbors have similar characteristics to home owners, including: square footage, proximity (90 percent live within 2 miles), heating/cooling systems , weather and number of occupants.

In a two-page report, customers can view their monthly/quarterly energy consumption, see their historical electrical usage, are ranked on an energy usage scale from 1 (best) to 100 (need improvement) with their virtual neighbors, and receive energy-saving tips customized for their home. Additionally, all participating customers have access to online websites where they can track the same data online, but also have the ability to set their own energy-saving goals, view more energy-saving tips and get insight into what everyone else is doing to save energy (Top Energy-Saving Tips). In addition, programs and initiatives available from the Energy Efficiency Fund are promoted through the Home Energy Reports.

In 2010, the Energy Efficiency Fund, CL&P and UI initiated a Round of Inquiry, and ultimately a Request for Proposal, to initiate a statewide information-based energy conservation pilot. In January 2011, CL&P and UI launched separate energy conservation pilots with the same vendor: OPOWER.

CL&P

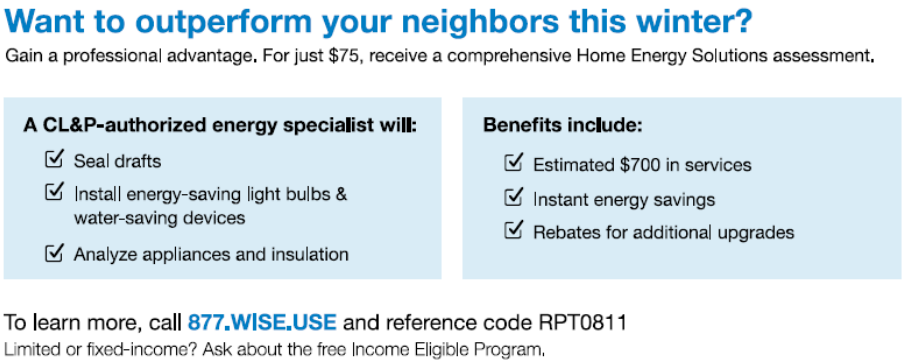
In CL&P's service territory, 24,000 residential customers were selected to receive monthly or quarterly reports about their energy usage and tips on how they could save energy. Pilot program administrators designed the pilot to test the incremental conservation impacts of reporting frequency, channel and duration.



Preliminary results from the first three months of the pilot indicate CL&P's Pilot customers have reduced their energy consumption by 1.7 percent as compared to the 24,000 customers in the Control Group.

Program administrators have implemented additional customer engagement projects, including Home Energy Solutions program promotions, postcards encouraging online account creation/participation, and targeted tips regarding Energy Efficiency Fund programs.

Example: Home Energy Solutions Program Promotion (August 2011)



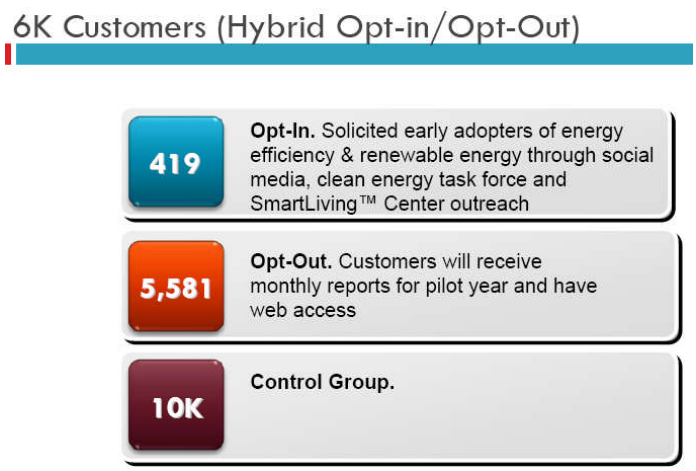
In an effort to gather more data to evaluate the effectiveness of behavioral-based energy programs, CL&P has determined that it will extend the current Pilot for a Year II (February 2012-February 2013) to the remaining 20,000 Pilot customers and expand it to include an additional 10,000 customers (Expansion Year I: February 2012-February 2013). Year II will include more online engagement, including social media applications (Facebook and Twitter) and 1-2 special coupons to promote LED bulbs and Home Energy Solutions program/rebates.

In addition, CL&P will look into conducting other behavior-based pilots, including working with Yankee Gas to develop a separate natural gas pilot for residential customers. In an effort to study how small business owners react to behavioral-based energy programs, CL&P will conduct a Round of Inquiry and coordinate several focus groups with small business owners and CL&P account executives to determine the need, make-up and requirements to conduct a Small Business pilot.

CL&P's Year I Pilot with OPOWER is currently undergoing a quantitative and qualitative evaluation by Nexus Market Research through the Evaluation, Measurement and Verification (EM&V) process. This evaluation may be extended to study the energy savings and customer response during Year II.

UI

In UI's service territory, a hybrid approach was utilized with 419 voluntary participants and 5,581 selected customers. These customers received monthly reports detailing their energy usage and suggesting energy-saving tips, as well as encouraging participation in energy efficiency programs offered through the Fund.



Preliminary results from the first three months of the pilot indicate UI's Pilot customers have reduced their energy consumption by 2.1 percent as compared to the 10,000 customers in the Control Group. Program administrators have implemented additional customer engagement projects including Home Energy Solutions program promotions, email reminders of report mailings and a coupon redemption program planned for January 2012.

The current pilot does not include Southern Connecticut Gas or Connecticut Natural Gas; however, if PURA approved the continuation of the customer engagement, SCG and CNG customer engagement program could be offered in the 3rd or 4th quarter of 2012. In addition, Small Business and Municipal Customers could be enrolled in the Program pending PURA approval.

UI's 2011 Pilot with OPOWER is currently undergoing a customer satisfaction evaluation by Nexus Market Research. In 2012, UI will continue to evaluate the effectiveness of information-based energy conservation pilots

Neighbor To Neighbor Energy Challenge

Home Energy Solutions and Home Performance Contractor Services ("Contractor Services") are a key component of the *Neighbor to Neighbor Energy Challenge* ("N2NEC"), an innovative community-based initiative in 14 towns across Connecticut, supported by the U.S. Department of Energy ("DOE") through the competitive Energy Efficiency Conservation Block Grant Program known as the BetterBuildings program. N2NEC was one of about 20 initiatives selected from applications by smaller municipalities across the country. The program's focus is achieving 20% residential energy reductions in 10% of homes in designated towns.

The Neighbor to Neighbor (N2N) Energy Challenge is a partnership of nine entities including the Clean Energy Fund that received an US Department of Energy Efficiency Conservation Block Grant under Funding Opportunity Announcement DE-FOA-0000148. N2N engages households in fourteen towns to set specific and measurable goals for energy efficiency, conservation, and renewable energy. CL&P is working in partnership with N2N to provide comprehensive technical support to the program. Customer

privacy and information security is a priority for CL&P. CL&P and N2N have negotiated a security agreement to ensure customer privacy and information is transferred and stored in a secure environment. Aggregated and individual participant customer usage data is supplied on an ongoing basis to the N2N data processing subcontractor. CL&P technical staff continues to conduct monthly update meetings with N2N to ensure uninterrupted data flow to the program over its projected 3 year term.

Goals:

Refer to Standard Filing Requirements for program goals.

CL&P Standard Filing Requirement

Clean Energy Communities/Behavioral Pilot

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 33	$ 138	$ 146	$ 190	$ 380	$ 305	a)	$ 305
Contractor Staff	$ 3	$ 31	$ -	$ 21	$ 42	$ 15		$ 15
Total Labor	$ 37	$ 169	$ 146	$ 211	$ 422	$ 320	a)	$ 320
Materials & Supplies	$ 0	$ 1	$ -	$ -	$ -	$ -		$ -
Outside Services	$ 3	$ 614	$ 620	$ 78	$ 423	$ 656	b)	$ 557
Marketing	$ 4	$ 174	$ 80	$ 6	$ 50	$ 20		$ 17
Administrative Expense	$ 2	$ 2	$ 2	$ 0	$ 2	$ 2		$ 2
Other	$ 1	$ 0	$ 2	$ 2	$ 2	$ 2		$ 2
Total	$ 46	$ 960	$ 850	$ 297	$ 900	$ 1,000		$ 898

a) Includes $150K Behavioral Based Pilot (labor only); $40K for Neighbor-to-Neighbor(NU IT Labor).

b) Includes $300k for Clean Energy Communities rewards and incentives for meeting Energy Efficiency Track goals; $70k for Cool Congregations Challenge led by Interreligious Eco-Justice Network; $60k for Neighbor-to-Neighbor community awards; $50k for funding Northwest Conservation District grassroots organization of 34 Northwest towns.

2012 Goals and Metrics Information

Design/Conduct behavioral pilot.

Market - Not for profit energy efficiency organizations.
Work with local and municipal 'green' organizations.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Clean Energy Communities / Behavioral Pilot

Baseline Assumptions:

Market — Not for profit energy efficiency organizations. Municipal "green" organizations

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ 20,966	$ 26,822	$ 14,917	$ 26,822	$ 28,297	$ 29,712
Contractor Staff	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor	$ 20,966	$ 26,822	$ 14,917	$ 26,822	$ 28,297	$ 29,712
Materials & Supplies	$ 20,629	$ 6,000	$ 1,371	$ 6,000	$ 6,000	$ 6,000
Outside Services	$ 110,462	$ 132,000	$ 12,436	$ 131,975	$ 253,703	$ 252,288
Incentives	$ 1,900	$ -	$ -	$ -	$ -	$ -
Marketing	$ 17,125	$ 12,000	$ -	$ 12,000	$ 12,000	$ 12,000
Other	$ -	$ -	$ 25	$ 25	$ -	$ -
Administrative Expenses	$ 1,418	$ -	$ -	$ -	$ -	$ -
Total	$ 172,500	$ 176,822	$ 28,749	$ 176,822	$ 300,000	$ 300,000

Goals and Metrics Information:

	2012
Outreach to Energy task force to create local energy efficiency goals and objectives	8

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SmartLiving Center & Museum Partnerships (Electric)

Objective:

The objective of both the SmartLiving Center and Museum Partnerships program is to educate Connecticut residents about the importance of energy efficiency through an educational center, exhibits and partnerships with museums. For several years, the Fund's strategic partnerships with learning centers and museums have created a cohesive branding and educational opportunity for the Fund throughout Connecticut. The effort has three approaches that are used:

1. Educational Centers

SmartLiving Center, Orange, Conn.
An energy education learning center, open since 2001, serving all ages

2. Museum Partnerships

Developing energy education exhibits through strategic partnerships with museums

Connecticut Science Center, Hartford, Conn.
Energy City Gallery, open since June 2009, serving ages 10 to adult

The Discovery Museum, Bridgeport, Conn.
Permanent energy gallery, open since fall 2009, serving children ages 6-13

Stepping Stones Museum for Children, Norwalk, Conn.
Permanent energy gallery opening in December 2010 serving children ages 3-10

Connecticut Resource Recovery Authority
Trash Museum, Hartford, Conn.
Permanent energy & recycling exhibits opening in 2011 serving children of all ages

3. Traveling Exhibits

Stepping Stones Museum for Children, Statewide
Conservation Quest™ Mini-Exhibit
Traveling energy exhibit touring nature centers, schools and municipalities available since Fall 2009.
Serving children ages 3-10

Semi-permanent Displays, Statewide
Refurbished energy exhibits that can be installed on semi-permanent basis at nature centers, schools and municipalities serving children ages 3-10

Target Market:

The target market for the SmartLiving Center and Museum Partnerships programs is: architects, builders, designers, schoolteachers, educators, students, homeowners, homebuyers, residential and business customers, trade allies and not for profit organizations.

Program Description:

The Fund and Electric Companies have developed very successful partnership exhibits at museums and centers across Connecticut. In an effort to support existing partnerships, the programs' focus will be on supporting programming, events and workshops to be held at Fund-sponsored exhibits and centers. This focus will allow Program Administrators to advance the efficient use of energy by encouraging Connecticut residents, schoolchildren, teachers and businesses to visit the centers and museums.

SmartLiving Center, Orange, Conn.
Energy Education Learning Center
The SmartLiving Center is an interactive, professionally staffed facility that serves as a high-profile resource for promoting energy-efficient products, services and ideas to educate customers about energy efficiency. It is an educational facility featuring training sessions and seminars, special events and tours; all geared toward teaching customers that they can use energy wisely while keeping an eye on the environment and not sacrificing comfort or style.

Displays
The SmartLiving Center features hands-on displays and demonstrations of energy efficient appliances; lighting technologies, weatherization and new construction practices. The SmartLiving Center's knowledgeable staff provides technical assistance and advice related to energy efficiency and conservation. The SmartLiving Center exists as a resource to cross-promote a variety of Fund programs, efforts of the Clean Energy Finance and Investment Authority (CEFIA), water and natural gas efficiency activities. It also complements the local retail marketplace and includes those retailers in promotions and displays at the Center.

In 2011 and continuing in 2012, the SmartLiving Center will make enhancements to the existing displays including lighting replacements and upgrades to include all varieties of CFLs and LEDs. By engaging existing relationships with partner organizations, vendors and Energy Efficiency Fund residential and commercial programs, the SmartLiving Center exhibits are maintained and upgraded at little to no cost.

Seminars
The SmartLiving Center offers educational seminars to adults after work and on weekends with topics regarding residential and commercial energy efficiency and renewable energy. Presenters discuss concepts, technology and installation practices of a particular energy topic and attendees are encouraged to share specific home improvement questions and concerns.

Meeting Space
The SmartLiving Center is available at no cost to contractors, nonprofits, civic organizations and groups for meeting space. The SmartLiving Center will open early or remain open after hours and on weekends to accommodate the needs of the organization. The meeting space can accommodate up to 40 adults in either a lecture or table/chairs set-up.

Educational Tours
Working in conjunction with the ***eesmarts*** program, the SmartLiving Center offers educational tours to promote energy efficiency measures to students in elementary, middle, high and technical schools as well as college and university students. Educational tours are available to all age groups including Kindergarten to adult, schools, classes and after-school groups (i.e., boy scouts, girl scouts, civic organizations, etc). Themes for the tours include the origins of energy, energy efficiency, energy conservation and alternate sources of energy. The tours make use of the SmartLiving Center's interactive displays as well as lecture and question and answer sessions.

Events
The SmartLiving Center hosts two events per year including Earth Day (April), and Family Science Day (October). The events are opportunities for adults and children to learn about energy-saving activities and home improvement opportunities in an effort to protect the environment while incorporating fun for the whole family.

Staff
In December 2010, UI issued a Request for Proposals for staffing at the SmartLiving Center. In early 2011, UI selected the Capitol Region Education Council, one of the six Regional Education Service Centers (RESCs) in Connecticut. CREC provides a rich background in school operations management, professional development for classroom management, strategic planning skills and relationships with energy and energy efficiency partners to provide an expert staff and tools for continued development and the strategic future of the SmartLiving Center offerings. The CREC staff began in April 2011 and has already provided a wealth of new ideas and organizational management without any noticeable interruption to customers.

Museum Partnerships

Connecticut Science Center, Hartford, Conn.
Energy City Gallery
In June 2005, the Fund and the CCEF entered into a $2 million partnership with the Connecticut Science Center to fund the Energy City Gallery – a model sustainable city that showcases exhibits on energy-efficient and clean, renewable energy technologies.

The Energy City Gallery contains a Climate Change Theater, an interactive 20-minute presentation on climate change and its relationship to the way humans use energy. Exiting the theater, visitors can

make their way through the model sustainable city – Greenslope – where they can observe and interact with technologies and learn about behaviors that can mitigate their negative environmental impacts.

Greenslope is laid out as a typical metropolis with residential dwellings, school, office space, manufacturing facility and a town hall. Greenslope residents and businesses have learned to live sustainably – meeting their current needs without sacrificing the ability to meet the needs of future generations. Inefficient technologies have been replaced with compact fluorescent light bulbs, ENERGY STAR refrigerators, windows and occupancy sensors. Buildings still use electricity to power computers, machines and lights; however, their electricity comes from photovoltaic panels, wind turbines and biomass facilities instead of polluting fossil fuels.

The Energy City Gallery features exhibits on sustainability, energy-efficient windows, passive solar design, residential solar PV installations, energy-efficient appliances/lights, wind power, biomass, hydropower, fuel cells, and real-time energy monitoring systems, day lighting and occupancy sensors and LED traffic lights.

Since opening in 2009, more than 550,000 people have visited the Connecticut Science Center including nearly 100,000 students. More than 70,000 individuals have participated in energy-related programming. Preliminary results (first year) of a three-year evaluation of the Energy City Gallery have noted significant increases in public understanding of energy efficiency and renewable energy sources as a result of their exposure to the exhibit.

Since 2009 and continuing through 2012, the Fund offers Connecticut Science Center yearlong passes to educators upon completion of an ***eesmarts*** professional development workshop.

Starting in 2012, the Fund will enter into a two-year partnership with the Connecticut Science Center to support the upgrade of the Climate Change Theater and Energy City Gallery exhibits to ensure that content reflects the latest technological advancements and scientific knowledge associated with clean and efficient energy technologies. This includes:

- Funding in the amount of $15,000 to upgrade the “In Your Community” exhibit in the Energy City Gallery to support CPTV videos on student energy-related projects. Includes new touch monitor, supporting programming and student project display component.
- Funding in the amount of $15,000 to support the establishment of an “Energy Review” panel, including scientists from the National Renewable Energy Laboratory, to complete a technical review of the Energy City Gallery exhibits and work with the Connecticut Science Center’s exhibit team to develop recommendations for making upgrades to the exhibits.
- Funding in the amount of $192,500 toward upgrading the Climate Change Theater, including both the video content and associated theater props.

The Fund will look toward its initial funding partner, the Connecticut Clean Energy Finance & Investment Authority; to assist with the remaining funds ($192,500) needed to upgrade the Climate Change Theater.

Stepping Stones Museum for Children, Norwalk, Conn.
Energy Lab Gallery
In January 2009, the EEB approved funding for a permanent energy gallery, Energy Lab, at Stepping Stones Museum for Children ("Stepping Stones") that opened in November 2010. The 1,300 square foot Energy Lab Gallery is an immersive, solar, wind and water environment that sets the stage for children to learn about the science of energy – sources, uses, and emerging alternatives.

Energy Lab Gallery exhibits include:

- An energy wall focuses on potential/kinetic energy, energy transformations and renewable/nonrenewable energy sources.
- A water lab allows visitors to explore the water cycle and learn about hydropower.
- A giant wind tunnel offers children a chance to feel the force of wind, manipulate wind turbine blades to find the most efficient configurations and invent new designs.
- A solar lab shows how energy from the sun grows plants, heats homes and powers cars.
- A nonrenewable lab allows visitors to crawl below the surface of the earth to see where fossil fuels come from.

As part of the Fund's sponsorship of the Energy Lab Gallery, Stepping Stones is utilizing ***eesmarts*** lessons in conjunction with educational outreach, workshops and conservation nights. Several of Stepping Stones' educators and docents have attended 2010 and 2011 ***eesmarts*** Summer Institute workshops held on-site at the museum to enhance the museum's energy-related programming.

Beginning in 2010 and continuing into 2012, the Fund offers Stepping Stones year-long passes to educators upon completion of an ***eesmarts*** professional development workshop. This encourages educators to utilize their ***eesmarts*** lessons and training.

In October 2011, the Fund will sponsor Energy Conservation Month activities and programming at Stepping Stones. Month-long activities will include ***eesmarts*** book readings, Conservation Quest™ mini-exhibit, hands-on activities and demonstrations.

Stepping Stones Museum for Children, Statewide
Conservation Quest™ Mini-Exhibit and Tour
In January 2009, the EEB approved funding for a four-year partnership between the Fund and Stepping Stones to create the Conservation Quest mini-exhibit to be recreated from Stepping Stones' popular *Conservation Quest* that debuted at Governor M. Jodi Rell's One Thing Expo in 2008. Stepping Stones

developed a smaller, more portable tour to travel to schools throughout the state, setting the stage for school children to learn about energy conservation through direct, hands-on experiences.

In 2011, Stepping Stones educators traveled statewide to schools to introduce the content, lead initial programs and then let various grade levels enjoy the exhibits at their own pace. The mini-exhibit and tour reinforce the energy efficiency and clean energy components that align with the Fund's mission. In 2011, the Conservation Quest mini-exhibit traveled to approximately 40 schools and community centers, reaching more than 100,000 Connecticut residents. The mini-exhibit has had bookings more than a year in advance, and 2012 is scheduled to be another successful year.

The Discovery Museum, Bridgeport, Conn.
Energy Gallery
The PURA and the EEB approved the 2009 C&LM Plan to develop an Energy Gallery at The Discovery Museum that would incorporate hands-on, interactive, permanent exhibits to promote energy efficiency and renewable technologies and cross-promote the SmartLiving Center and ***eesmarts*** while recognizing the mission of the Fund.

The exhibit highlights four main sources of energy: fossil fuels, wind power, hydropower and solar. Each energy source starts from a different point in the exhibit, connecting to a grid, a substation, a transformer and ultimately to the home. Inside the exhibit's home, visitors can choose between efficient and inefficient appliances while watching the electric demand change on the house's meter.

Since 2010 and continuing in 2012, the Fund will offer Discovery Museum year-long passes to educators upon completion of an ***eesmarts*** professional development workshop.

Connecticut Resource Recovery Authority

The Trash Museum, Hartford, Conn.
Permanent Exhibits
The PURA and the EEB approved the 2010 C&LM Plan to provide funding for exhibit upgrades at the Connecticut Resource Recovery Authority's Trash Museum in order to add an energy conservation component to the concepts of reduce, reuse, and recycle.

In 2010 and 2011, the Companies, on behalf of the Fund, worked with the Educational Outreach Staff of the Trash Museum to ensure milestones were met pertaining to the following exhibit components:

- Incorporating conservation and energy efficiency components to the existing 90-minute educational programs offered to school children statewide.
- Development of the Recycl-O-Meter, a physical exhibit and online web tool for visiting school children to calculate the amount of recycled materials into kWh savings.

- Development of exhibit upgrades at the Museums to incorporate energy and energy efficiency components.

In 2012, the Companies will continue to work with the Connecticut Resource Recovery Authority's Trash Museum to ensure all milestones are met in an effort to offer school children and visitors a complete education in recycling, including an energy conservation and energy efficiency component.

Semi-permanent Displays, Statewide

Energy Exhibits

In 2005, the Fund sponsored three permanent energy efficiency exhibits at the Stepping Stones Museum for Children in Norwalk. As the museum has undergone extensive renovations and has created the new permanent Energy Lab Gallery that opened in 2010, there was no longer room for the 2005 exhibits. The museum gave the exhibits back to CL&P and the Fund in the Fall of 2009, and they have been refurbished/updated to address new technologies, i.e., LEDs.

The exhibits include a What's Your Wattage exhibit comparing lighting technologies, and Energy Stacker game comparing inefficient vs. ENERGY STAR technologies, a Connect the Circuit display and Energy House video display. In July 2011, the refurbished displays were showcased at the DEEP's offices in celebration of Take-Your-Child-to-Work Day.

Marketing Strategy:

Promotion of the Museum Partnerships program is primarily accomplished through advertising and public relations, generated by the individual museum. The SmartLiving Center employs promotions specific to its calendar of events. The Electric Companies may augment museum promotional efforts using a variety of public relations tactics that may include:

- Development of special events or workshops held to spotlight Fund exhibits, programs, energy efficiency trends and community collaborations. These events include Earth Day events, Family Science Days, home shows and eco-festivals.
- Cross-promotion of museum exhibits and SmartLiving Center events through other Fund programs and partnerships, such as ***eesmarts*** and eeCommunities.
- Articles and notices via electronic newsletters, CTEnergyInfo.com and Electric Companies' websites.
- Direct mail regarding ***eesmarts*** bus reimbursements to the SmartLiving Center and ***eesmarts*** season passes to the Connecticut Science Center, The Discovery Museum and Stepping Stones Museum for Children.
- Tie-ins with weatherization and conservation campaigns and special events.
- Weatherization and conservation campaigns.

- On-going seminars and meetings.

Goals:

Refer to Standard Filing Requirements for program goals.

New Program Issues:

In the Department of Public Utility Control (DPUC) final decision dated March 17, 2010 in reference to Docket No. 09-10-03 on pages 47-48, the Electric Companies, in concert with the Energy Efficiency Board, were ordered to submit an evaluation and recommendation regarding the future of the SmartLiving Center on or before July 21, 2010.

In compliance with the Department's directive, the EEB and the Electric Companies explored the following options for the future of the SmartLiving Center. Of the twelve votes submitted at the June 9, 2010 ECMB meeting, five voted for Option 1, six voted for Option 2, and two voted for Option 3.
Option 1: Close the SmartLiving Center in Orange, Conn., and continue the Museum Partnerships Program.
Option 2: Renew the lease of the SmartLiving Center in Orange, Conn. and open a SLC-Hartford location. Continue to fund the Museum Partnerships program.
Option 3: Close the current SmartLiving Center in Orange, Conn., and open two new SmartLiving Centers in Greater Bridgeport and Greater Hartford.

On August 31, 2010, the DPUC submitted a letter to the Electric Companies stating that based on the June 9, 2010 EEB vote, it is clear that the Board is divided on this issue. Therefore, absent clear direction from the EEB, it would be inappropriate for the Department to rule on this significant issue or to extend the current lease for an additional five years without a more comprehensive review of the matter.

Based on the foregoing, the Department authorized UI to extend the current lease for up to two years. UI signed a two year lease with the property of 297 Boston Post Road, Orange commencing on April 1, 2011 for the continued operation of the SmartLiving Center until March 31, 2013.

Connecticut customers would benefit from the continued expansion of SmartLiving Center exhibits - in particular, a remodeled Center tailored to further engage the benefits of the Fund's residential programs, including HES, HVAC, and Heat Pump Water Heaters, would create an experience similar to walking through a home using tools such as a blower door test, duct sealing, cross sections of insulation, efficient windows, and caulking showing residents how to save energy.

CL&P Standard Filing Requirement

SmartLiving Center and Museum Partnerships

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 22	$ 17	$ 21	$ 6	$ 21	$ 28	a)	$ 28
Contractor Staff	$ 0	$ 1	$ -	$ -	$ -	$ -		$ -
Total Labor	$ 22	$ 18	$ 21	$ 6	$ 21	$ 28		$ 28
Materials & Supplies	$ 0	$ 0	$ 10	$ -	$ 10	$ 10	c)	$ 10
Outside Services	$ 51	$ 95	$ 354	$ 46	$ 350	$ 347	b)	$ 347
Fees & Incentives	$ -	$ -	$ -	$ -	$ -	$ -		$ -
Marketing	$ 20	$ 19	$ 15	$ 0	$ 15	$ 15	d)	$ 15
Administrative Expense	$ 0	$ 1	$ -	$ 0	$ -	$ -		$ -
Other	$ 0	$ 0	$ -	$ -	$ -	$ -		$ -
Total	$ 92	$ 132	$ 400	$ 53	$ 396	$ 400		$ 400

a) Includes CL&P Administration of Science Center and Stepping Stones Museum projects.

b) Creative support for museum projects. Includes $150k Stepping Stones Museum exhibit payments. Includes sponsorships for museum/public facilities exhibits and workshops.

c) Includes printing/design costs for educational materials.

d) Includes direct mail/collateral and grassroots/PR.

2012 Goals and Metrics Information

The SLC and Museum Partnerships program do not have any kW or kWh savings metrics

Demand Savings (kW reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate ($/kWh)	N/A
Lifetime Cost Rate ($/kWh)	N/A
Electric b/c Ratio	N/A
Total Resource b/c Ratio	N/A

Metrics

None

CL&P Program Notes - SmartLiving Center- Museum Partnerships

Budget/FTE

0.2 FTEs for program administration

Goal

Not applicable.

Cost/Unit

Not applicable.

Goal Setting Methodology

Not applicable.

Metric Changes

Establish a long-term presence at museums, schools and educational centers.

Science Center

All dollar values are in $000

Budget Projections	2009 Actuals		2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:									
NU Labor	$ -		$ -	$ -	$ -	$ -	$ -		$ -
Contractor Staff	$ -		$ 0	$ -	$ -	$ -	$ -		$ -
Total Labor	$ -		$ 0	$ -	$ -	$ -	$ -		$ -
Materials & Supplies	$ -		$ -	$ -	$ -	$ -	$ -		$ -
Outside Services	$ 206			$ -	$ -	$ -	$ 166		$ 166
Incentives	$ -		$ -	$ -	$ -	$ -	$ -		$ -
Marketing	$ -		$ -	$ -	$ -	$ -	$ -		$ -
Administrative Expenses	$ -		$ -	$ -	$ -	$ -	$ -		$ -
Other	$ -		$ -	$ -	$ -	$ -	$ -		$ -
Total	$ 206	a)	$ 0	$ -	$ -	$ -	$ 166	b)	$ 166

a) This represents an annual $200k paid to the CTCSE over the five-year $1M Contract time period (2005-2009) for an energy efficiency exhibit.
b) This represents CL&P's share over a two year period for upgrades to the Climate ChangeTheater and review team led by N&I Renewable Energy Laboratory staff to evaluate exiting exhibits.

2012 Goals and Metrics Information

Demand Savings (kW reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate ($/kWh)	N/A
Lifetime Cost Rate ($/kWh)	N/A
Electric b/c Ratio	N/A
Total Resource b/c Ratio	N/A

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

SmartLiving Center®

Baseline Assumptions:

Market — UI residential customers, appliance retailers, builders, developers, realtors

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 57,750	$ 61,916	$ 32,646	$ 61,916	$ 65,395	a)	$ 68,665
Contractor Staff	$ 185,183	$ 171,814	$ 34,145	$ 132,236	$ 171,814	b)	$ 171,814
Total Labor	$ 242,933	$ 233,730	$ 66,791	$ 194,152	$ 237,209		$ 240,479
Materials & Supplies	$ 18,291	$ 10,000	$ 4,293	$ 10,000	$ 6,521	c)	$ 6,500
Outside Services	$ 8,446	$ 4,500	$ 44,078	$ 44,078	$ 27,000	d)	$ 27,000
Incentives	$ -	$ -	$ -	$ -	$ -	e)	$ -
Marketing	$ 47,407	$ 35,000	$ 8,027	$ 35,000	$ 35,000	f)	$ 31,767
Other	$ 170,505	$ 174,016	$ 109,361	$ 174,016	$ 174,016	g)	$ 174,000
Administrative Expenses	$ 2,193	$ 2,000	$ 636	$ 2,000	$ 2,000	h)	$ 2,000
Total	$ 489,775	$ 459,246	$ 233,186	$ 459,246	$ 481,746		$ 481,746

a) .58 FTE
b) Day-to-day contract staffing of Center
c) Tours and seminar supplies, office supplies
d) Display Maintenance and updates
e) No comment
f) Marketing of specific events (Earth, Conservation and Family Science Days) Seminars and General Awareness
g) Stepping Stone Museum mobile display, Rent, utilities, trade services (HVAC, phone, internet, dumpster etc.)
h) Meals, miles, travel and training

Goals and Metrics Information:

	2012
# of Visitors	15,000

The United Illuminating Company
LF-26 Standard Filing Requirement

SmartLiving Center®

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$300	$307	102.3%
2001	$524	$836	159.5%
2002	$423	$392	92.7%
2003	$531	$345	65.0%
2004	$478	$370	77.4%
2005	$428	$410	95.8%
2006	$286	$294	102.8%
2007	$335	$353	105.4%
2008	$334	$347	103.9%
2009	$534	$476	89.1%
2010	$459	$490	106.8%
2011	$459		
2011 YTD (Jun)	$459	$233	50.8%
2011 YE Projected	$459	$459	100.1%
2012	$482		

Goal - Number of Customers Served

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	5,000	7,977	159.5%
2003	11,340	6,221	54.9%
2004	8,500	7,565	89.0%
2005	10,000	11,141	111.4%
2006	10,000	10,392	103.9%
2007	10,000	12,523	125.2%
2008	10,000	12,940	129.4%
2009	15,379	12,944	84.2%
2010	15,000	14,555	97.0%
2011	15,000		
2011 YTD (Jun)	15,000	5,212	34.7%
2011 YE Projected	15,000	15,000	100.0%
2012	15,000		

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes - SmartLiving Center

Budget/FTE:

.58 FTE for contract administration, financial administration and strategic oversight

Goal:

15,000 customer goal

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Science Center

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ -	$ -	$ -	$ -	$ -	$ -
Contractor Staff	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor	$ -	$ -	$ -	$ -	$ -	$ -
Materials & Supplies	$ -	$ -	$ -	$ -	$ -	$ -
Outside Services	$ -	$ -	$ -	$ -	$ 42,000	$ 42,000
Incentives	$ -	$ -	$ -	$ -	$ -	$ -
Marketing	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -
Administrative Expenses	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ -	$ -	$ -	$ -	$ 42,000	$ 42,000

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eesmarts™ (Electric)

Objective:

The purpose of the ***eesmarts*** program is to develop an energy-efficient ethic among all school age students in Connecticut, encouraging them to incorporate energy-efficient practices and behaviors into their lives at home and at school.

For 2012, the ***eesmarts*** program has four primary objectives:

Objective 1: ***eesmarts*** will continue to emphasize and promote professional development workshops. Educator training will focus on science concepts related to energy, as well as applications of ***eesmarts***, energy conservation habits and energy-efficient technologies.

Objective 2: ***eesmarts*** program material distribution will continue to be limited to decision makers within the school district: administrators, curriculum directors, and educators who have participated in ***eesmarts*** professional development workshops. ***eesmarts*** Take-Home Worksheets will be made available online to all Connecticut educators, students, environmental organizations and energy task forces.

Objective 3: Program lesson material will continue to be fully aligned with the Connecticut State Department of Education science and mathematics frameworks and inquiry-based teaching methods.

Objective 4: ***eesmarts*** will implement a concerted effort to reach out directly to schoolchildren through the eeEvents initiative, including in-classroom activities, book readings, Earth Day presentations, and various other school assemblies

Target Market:

For 2012, the ***eesmarts*** program will continue to target its efforts to educating K-12 Connecticut classroom educators and schoolchildren about the importance of energy-efficient behaviors.

The Electric Companies will continue to target all K-12 public, private, magnet, and charter school districts and classroom educators statewide. The Companies will also continue and expand their partnership with Connecticut's Technical High School system, now in its sixth consecutive year.

Program Description:

eesmarts is an energy-efficiency and clean-energy learning initiative. The ***eesmarts*** mission and program offerings are distributed statewide in the form of:

- Professional Development Workshops for Educators;

- Teachers guides and lesson materials; and
- Outreach and partnerships.

Professional Development Workshops for Educators

eesmarts offers two types of educator training opportunities: custom workshops for school districts in Professional Development (PD) workshops and general training for individual educators in Continuing Education Unit (CEU) workshops.

PD Workshops are offered to school districts and educational organizations. They are specifically tailored to align with city/town/district curriculum plans, and are designed to improve an educator's understanding of science and how to incorporate ***eesmarts***' lessons and activities into the city/town/district's curriculum framework and the Connecticut State Department of Education Framework.

CEU Workshops are offered to individual educators but are not specifically tailored to each individual educator's city/town/district's curriculum plans. These workshops are designed to improve an educator's understanding of science and how to teach it in the classroom. Lessons and hands-on activities are demonstrated that support the Connecticut State Department of Education Framework. As a result of CEU workshops being held after-hours and during the summertime, ***eesmarts*** administrators have implemented a stipend to educators to compensate them for their time and travel to these workshops.

In 2011, ***eesmarts*** provided custom professional development workshops for Colchester, Glastonbury, Newington, Rocky Hill and UCONN Pre-service teachers.

In July 2007, the ***eesmarts*** program initiated a pilot Summer Institute for 31 grade 3-5 teachers at Wesleyan University. In subsequent years, the Summer Institute has grown to include three weeks of instruction in basic, advanced and topical workshops covering topics related to energy, energy efficiency, conservation and clean/renewable resources.

In 2011, ***eesmarts*** offered the Summer Institute in two locations to better serve educators statewide and to celebrate the Museum Partnerships program. The 2011 Summer Institute was offered at Stepping Stones Museum for Children in Norwalk and Wesleyan University in Middletown. Since 2010 and again in 2011, the ***eesmarts*** team partnered with the Clean Energy Finance and Investment Authority at the Summer Institute to engage the upper middle- and high school-level teachers in more advanced clean, renewable energy-source topical-workshop instruction. Increasing in popularity each year, the 2011 workshops welcomed a total of 134 teachers. Throughout the past three years, the ***eesmarts*** Summer Institute has trained more than 500 educators in grades pre-K through 9.

At the culmination of an ***eesmarts*** workshop, educators must submit an information contract, known as a Curriculum Request Agreement ("CRA"). The CRA must be signed by the participating educator and

a school administrator (e.g., principal, assistant principal, or district curriculum director). By signing the CRA, the educator agrees to utilize the ***eesmarts*** program materials, administer student assessments and return their teacher evaluation. All educators must submit a signed CRA to obtain lesson materials.

Teachers Guides and Lesson Materials

The ***eesmarts*** program materials consist of two major elements: Teacher Guides and Lessons.

The ***eesmarts*** Teacher Guides are grouped according to grade level: Grades Pre-K – 2, Grades 3 -5 and Levels I, II & III for middle and high school educators. The Teacher Guides provide educators with detailed lessons, experiments, background information on energy, energy efficiency and clean renewable energy sources and alignment with the Connecticut State Science and Mathematics frameworks.

In 2008, a third-party evaluation of the ***eesmarts*** program concluded that the ***eesmarts*** Program Administrators had made the recommended changes of a 2005 third-party evaluation, including the alignment of all ***eesmarts*** lessons with the Connecticut State Science Framework Content Standards and Grade Level Expectations.

In 2009, updated ***eesmarts*** curriculum materials for Grades 2-3 were developed, and in January 2010 were distributed to Connecticut's classrooms, complete with changes in content and design formats and updates of the comprehensive teacher guidebooks with new lessons and information. ***eesmarts*** program administrators worked with steering committee members from the Connecticut Department of Education, the Electric Companies, the Connecticut Clean Energy Fund, and the Institute for Sustainable Energy, as well as grades 2-3 pilot educators to ensure that the updates and changes were consistent with the state's educational inquiry and science and mathematics standards.

In 2010 and 2011, the ***eesmarts*** program developed Take-Home Worksheets and Fuel-to-Home Cards. The Take-Home Worksheets celebrated the first ***eesmarts*** curriculum units to be bilingual (English and Spanish). These include:

- Your Electric Environment Worksheet includes an overview of where electricity comes from and an opportunity for student to trace how electricity gets to their home.
- Becoming Energy Efficiency Smart (***eesmarts***) Worksheet includes a home light bulb audit, Energy Guide and phantom power overview and a home energy conservation score/pledge.

These Take-Home Worksheets will be offered to all Connecticut educators attending ***eesmarts*** professional development workshops. In addition, the ***eesmarts*** program will post these Worksheets online to offer all Connecticut educators, students, environmental organizations and energy task forces an opportunity for parental and community involvement.

The Fuel-to-Home Cards have been a part of the ***eesmarts*** lesson material offerings for many years. The old Cards trace the path of electricity generation from fossil fuels. In 2011, in response to ***eesmarts*** educators' feedback, the Cards were revitalized to include concepts of renewable energy sources (large scale to home PVs), conservation and energy efficiency. ***eesmarts***-trained educators can now receive four decks of Fuel-to-Home Cards, as well as a Teacher's Guide complete with 13 prompts for ways in which electricity is generated, transmitted, distributed and consumed in the home.

Outreach & Partnerships

The ***eesmarts*** program has developed select partnerships to engage in outreach to educators, schools, community organizations and students to further the mission of the program. Below is a list of partners and initiatives the ***eesmarts*** program has established and will continue to cultivate and offer in 2012.

eeEvents: The objective of ***eesmarts*** is to educate educators, but throughout the years, ***eesmarts*** program administrators have received an increasing number of requests to visit schools, assemblies and classrooms throughout the state to conduct in-classroom interactive and inquiry-based activities directly with students. In 2010, as a result of the eeEvents initiative being piloted statewide, ***eesmarts*** program administrators and partners have visited elementary and middle school classrooms, school assemblies, environmental club meetings, Boy/Girl Scout meetings and Earth Day events. Team members provide presentations about energy efficiency and hands-on activities for students or tailor an event to the needs of the school in order to engage and educate the community in energy efficiency, conservation and clean, renewable energy programs, practices and technologies. All visits are conducted in accordance with the needs of the students, teacher, class size and grade levels. In 2011, the ***eesmarts*** program offered eeEvents in Branford, Bridgeport, Cheshire, Easton, Glastonbury, Hartford, New Haven, New London, Norwalk, Orange and Plainville. The ***eesmarts*** program will offer the eeEvents program again in 2012.

eesmarts Student Contest: The Energy Efficiency Fund sponsors an annual ***eesmarts*** energy-efficiency contest that invites students to enhance their skills in science, writing and technology. Students are asked to answer grade-level-specific prompts regarding efficient and renewable technologies in a variety of formats including a poster project, an essay project and a community services project. The lower elementary grades (K – 3) compete by submitting drawings, illustrations and a narrative about how to save energy in their school or community. The upper elementary and middle school level (Grades 4 – 8) submit essays in response to grade-specific prompts about energy, energy efficiency and clean, renewable energy sources in students' homes, schools and communities. High-school level (Grades 9 – 12) students submit formal plans, procedures and expected results and outcomes for community service projects relating to energy, energy efficiency, conservation and clean renewable energy as it relates to their home, school or community.

The ***eesmarts*** program provides technical and financial assistance for the implementation of high -school -level community service projects. The contest is open to all students in Connecticut, and all project and essay prompts align with the Connecticut State Frameworks in science, mathematics and

writing. All participants receive recognition for their submissions, and winners are honored at a special awards ceremony at the Legislative Office Building at the state capitol.

Connecticut Science Fair: Since 2008, ***eesmarts*** has been a sponsor of the Sustainable Resources and Practices category at the Connecticut Science Fair. The science fair and this category, in particular, allow middle school students and educators to reflect on the major scientific principles and public policies that revolve around energy efficiency and clean, renewable energy, such as climate change and the depletion of fossil fuels.

In 2011, the ***eesmarts*** program sponsored both the Sustainable Resources & Practices (middle school) category as well as the Future Sustainability (high school) category at the Connecticut Science Fair. The first and second place winners of the Future Sustainability category, sisters Teresa and Bridget Oei, were given the opportunity to present their projects at the International Sustainable World Energy Engineering Environment Project (I-SWEEEP) Olympiad in Houston, Texas. Bridget's project, "Applying the Principles of the Tesla Engine to Design and Construct a Prototype of a Bladeless Wind Turbine," earned a Bronze medal prize in the Energy category.

Teresa, Bridget and their younger sister Maura have all been multi-year winners of the Sustainable Resources & Practices and the Future Sustainability categories at the Connecticut Science Fair. As a result of their continued passion for the exploration of environmental sciences, the Oei sisters were showcased in a segment produced by the Connecticut Public Television and funded by a grant from the Energy Efficiency Fund.

The ***eesmarts*** program will continue to sponsor both middle and high school categories in 2012.

Girl Scouts of Connecticut: In 2010, the ***eesmarts*** program initiated a partnership with the Girl Scouts of Connecticut to co-host Energy Forums for Girl Scouts statewide – an effort aligned with the Girl Scout's Forever Green initiative. In 2011, the ***eesmarts*** program further developed the partnership with Girl Scouts of Connecticut by hosting statewide Forever Green Energy Forums to teach Girl Scout troops and members of their communities about energy efficiency, conservation and clean renewable energy sources.

Prior to the Forever Green Energy Forums, ***eesmarts*** personnel trained high-school aged Girl Scout Energy Specialists in activities surrounding energy-related topics. These specialists led roundtable activities and discussions at the forums. In this manner, the older Scouts have an opportunity to pass their knowledge on to younger Girl Scout visitors. In Spring 2011, three Energy Forums reached 180 Girl Scouts statewide. Energy Specialist training and Energy Forums will also be scheduled throughout the 2011-2012 school year in all regions of the state.

Connecticut Technical High School System: ***eesmarts*** and the Clean Energy Finance and Investment Authority's Learning for Clean Energy Innovation ("LCEI") program have partnered on a variety of initiatives with the Connecticut Technical High School System ("CTHSS"). Since 2006, ***eesmarts*** has

provided professional development workshops for CTHSS electrician and science teachers and an on-site recognition ceremony for CTHSS electrical teachers. Starting in 2008, ***eesmarts*** and LCEI started partnering to conduct joint professional development workshops for CTHSS educators.

In 2010, ***eesmarts***, the Museum Partnerships program and LCEI again partnered with the CTHSS schools statewide to roll out the E-House initiative. An E-House is a 20- by 16-foot outdoor structure to be built, modified and maintained by and for students at six technical high schools statewide. In October 2009, the Clean Energy Finance and Investment Authority sponsored a $200K grant to the CTHSS toward the installation of solar thermal, solar photovoltaic and high-efficiency boilers within each of the six E-Houses. In addition to renewable technologies, the CTHSS approached ***eesmarts*** and Museum Partnerships to assist with funding for energy efficiency equipment, technical assistance and curriculum assistance to align with the technologies within the E-House.

Throughout 2010 and 2011, E-Houses began construction at E.C. Goodwin Technical High School (New Britain), Oliver Wolcott Technical High School (Torrington), Grasso/Southeastern Technical High School (Groton), Bullard-Havens Technical high School (Bridgeport), Platt Technical High School (Milford) and Cheney Technical High School (Manchester).

During the 2011-2012 school year, the Energy Efficiency Fund will again financially support CTHSS as they build E-Houses at Norwich Technical High School (Norwich), Kaynor Technical High School (Waterbury) and Emmett O'Brien Technical High School (Ansonia). All CTHSS students will have access to the E-Houses statewide.

The E-House initiative (on-site at EC Goodwin Tech in New Britain, Conn.) was showcase in a segment produced by the Connecticut Public Television and funded by a grant from the Energy Efficiency Fund.

Museum Partnerships: In 2011, the ***eesmarts*** program will continue to offer educational tours at the SmartLiving™ Center in Orange.

In 2010, the opening of the Energy Exhibit at The Discovery Museum in Bridgeport and the Energy Lab exhibit at Stepping Stones Museum for Children served as a new opportunity for teachers and students to learn about clean and efficient energy topics through the ***eesmarts*** program. In 2010 and continuing into 2011, the ***eesmarts*** program will enable museum education specialists with ***eesmarts*** professional development workshops to fully integrate the lesson materials into the daily programming at the Connecticut Science Center in Hartford, the Discovery Museum in Bridgeport and Stepping Stones Museum for Children in Norwalk.

All ***eesmarts***-trained educators are offered a year-long pass to drive visitors to the exhibits, funded by the Energy Efficiency Fund at Stepping Stones Museum for Children, The Discovery Museum and the Connecticut Science Center.

Marketing Strategy:

The Electric Companies plan to market this program to consumers and businesses through area museums, science centers, schools, and other public venues, to help educate them on the value and importance of energy efficiency. In this effort, the Companies will recruit schools and educators using strategies that may include:

- outreach to new and participating educators via utility Program Administrators and workshop vendors (as appropriate);
- updating of the ***eesmarts*** web site with an educators only access database, news features, links to more hands-on activities and lessons regarding energy, and links to events at the Fund's museum exhibits and centers;
- outreach to nonparticipating schools through teaser workshops, assemblies and activities for students;
- attendance at education conferences;
- joint partnership at SmartLiving Center & Museum Partnership events, Fund community events, Earth Day celebrations and book readings;
- promotion of the Spring 2012 student contest;
- Connecticut Science Fair;
- ***eesmarts*** public relations opportunities, and
- promotion of the fully aligned ***eesmarts*** lesson materials with Connecticut Science and Mathematics curriculum frameworks.

Goals:

Refer to Standard Filing Requirements for program goals.

K-12 Education

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 29	$ 16	$ 85	$ 16	$ 50	$ 84		$ 84
Contractor Staff	$ 1	$ 4	$ -	$ 0	$ -	$ -		$ -
Total Labor	$ 30	$ 21	$ 85	$ 16	$ 50	$ 84		$ 84
Materials & Supplies	$ -	$ 0	$ 3	$ 0	$ 4	$ 3		$ 3
Outside Services	$ 161	$ 298	$ 130	$ 71	$ 238	$ 231	a)	$ 231
Marketing	$ 2	$ 9	$ 4	$ 1	$ 5	$ 4	b)	$ 4
Administrative Expense	$ 4	$ 3	$ 3	$ 1	$ 4	$ 3		$ 3
Other	$ 0	$ 0	$ -	$ 0	$ -	$ -		$ -
Total	$ 197	$ 331	$ 225	$ 88	$ 302	$ 325		$ 325

a) Educational Consultant: PIMMS (Wesleyan University). Conduct teacher training workshops and promote curriculum. Fulfillment of curriculum requests. Warehouse vendor: WB Meyer; Curriculum Writer: The Writing Company.

b) Includes bill inserts, mailings to curriculum directors and principal/pilot programs.

2012 Goals and Metrics Information

The K-12 Program does not have a kW or kWh savings metric.

Demand Savings (kW Reduction Goal)	N/A
Annual Energy Savings (kWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate ($/kWh)	N/A
Lifetime Cost Rate ($/kWh)	N/A
Electric b/c Ratio	N/A
Total Resource b/c Ratio	N/A

Goal 1: Number of Workshops

20 Workshops (joint utility workshops) .

Energy Education Events

15 Events (joint utility workshops) .
Events with school children, i.e., book readings, eesmarts contests and service projects, green job training with CT Technical High School system.

K-12 Education

Goal - # Curriculum Delivered

Year	Goal	Actual	% Achieved
2001	n/a	n/a	n/a
2002	n/a	314	n/a
2003	n/a	n/a	n/a
2004	1400	2,058	147%
2005 Revised	800	1,282	160%
2006 Revised	600	561	94%
2007 Revised	600	1,311	n/a
2008 Revised	n/a	n/a	n/a
2009 Revised	n/a	331	n/a
2010 Revised	400	n/a	n/a
2011 Revised	225	n/a	n/a
2011 YTD (Jun)	n/a	88	39%
2011 Y/E Projected	225	302	134%
2012	325	n/a	n/a

Goal - Participation

Year	Goal	Actual	% of Goal
2001	n/a	n/a	n/a
2002	n/a	n/a	n/a
2003	n/a	n/a	n/a
2004	n/a	n/a	n/a
2005 Revised	n/a	n/a	n/a
2006 Revised	n/a	n/a	n/a
2007 Revised	n/a	n/a	n/a
2008 Revised	n/a	n/a	n/a
2009 Revised	n/a	n/a	n/a
2010 Revised	n/a	n/a	n/a
2011 Revised	n/a	n/a	n/a
2011 YTD (Jun)	n/a	n/a	n/a
2011 Y/E Projected	n/a	n/a	n/a
2012	n/a	n/a	n/a

Goal - Budget

Year	Budget	Actual	% of Goal
2001	$ 200,000	$ 159,000	80%
2002	$ 270,000	$ 215,000	80%
2003	$ 300,000	$ 249,000	83%
2004	$ 210,000	$ 62,000	30%
2005 Revised	$ 254,944	$ 233,000	91%
2006 Revised	$ 202,500	$ 159,987	79%
2007 Revised	$ 200,000	$ 233,000	117%
2008 Revised	$ 201,000	$ 208,000	103%
2009 Revised	$ 201,000	$ 331,133	165%
2010 Revised	$ 400,000	$ 333,133	83%
2011 Revised	$ 225,000	n/a	n/a
2011 YTD (Jun)	n/a	$ 88,369	39%
2011 Y/E Projected	$ 225,000	$ 301,875	75%
2012	$ 325,000	n/a	n/a

Program Ratios

	$/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2001	n/a	n/a	n/a	n/a
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	n/a	n/a
2004	n/a	n/a	n/a	n/a
2005 Revised	n/a	n/a	n/a	n/a
2006 Revised	n/a	n/a	n/a	n/a
2007 Revised	n/a	n/a	n/a	n/a
2008 Revised	n/a	n/a	n/a	n/a
2009 Revised	n/a	n/a	n/a	n/a
2010 Revised	n/a	n/a	n/a	n/a
2011 Revised	n/a	n/a	n/a	n/a
2011 YTD (Jun)	n/a	n/a	n/a	n/a
2011 Y/E Projected	n/a	n/a	n/a	n/a
2012	n/a	n/a	n/a	n/a

CL&P Standard Filing Requirement

CL&P Program Notes: K-12 Education

Budget/FTE

0.3	FTE for program administration

Goal

Conduct 20 Professional Development workshops for teachers.
Conduct 15 Energy Education Events.

Cost/Unit

Not applicable.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

K-12 Education

Baseline Assumptions:

Market: Primary and secondary schools throughout UI service territory

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud		2013 Bud
Labor							
UI Labor	$ 59,189	$ 61,916	$ 31,604	$ 61,916	$ 65,395	a)	$ 68,665
Contractor Staff	$ -	$ -	$ -	$ -	$ -	b)	$ -
Total Labor	$ 59,189	$ 61,916	$ 31,604	$ 61,916	$ 65,395		$ 68,665
Materials & Supplies	$ 242	$ 12,000	$ 976	$ 12,000	$ 8,521	c)	$ 8,500
Outside Services	$ 203,247	$ 197,698	$ 74,197	$ 197,698	$ 197,698	d)	$ 197,600
Incentives	$ 28,515	$ 75,000	$ 13,758	$ 75,000	$ 75,000	e)	$ 75,000
Marketing	$ 30,460	$ 47,411	$ 11,845	$ 47,411	$ 47,411	f)	$ 44,260
Other	$ 23,512	$ -	$ 1,197	$ 1,197	$ -	g)	$ -
Administrative Expenses	$ 1,313	$ 7,800	$ 476	$ 6,603	$ 7,800	h)	$ 7,800
Total	$ 346,478	$ 401,825	$ 134,053	$ 401,825	$ 401,825		$ 401,825

a) .58 FTE
b) No comment
c) Supplies for on-site and professional development activities
d) Warehousing, shipping, professional development services, Curriculum development, Summer Institute Workshops (Joint UI and CL&P)
e) SmartLiving Center tours, eesmarts bus and museum partnership reimbursements
f) Promotional supplies, targeted marketing of program
g) No comment
h) Meals, miles, travel and training

Goals and Metrics Information:

	2012
Curriculum Units Under Request Agreements	2,000
General/Custom Workshop	20
Educational Outreach Events - Essay Contest, Technical School Outreach, School Assemblies, etc	15

The United Illuminating Company
LF-26 Standard Filing Requirement

K - 12 Education

Goal - Program Costs (000's)

Year	Budget	Actual	% of Goal Achieved
2000	$363	$392	108.0%
2001	$427	$298	69.8%
2002	$377	$855	226.8%
2003	$427	$266	62.3%
2004	$319	$223	69.9%
2005	$416	$324	77.9%
2006	$302	$309	102.3%
2007	$281	$296	105.3%
2008	$282	$311	110.3%
2009	$432	$311	72.0%
2010	$432	$346	80.1%
2011	$402		
2011 YTD (Jun)	$402	$134	33.3%
2011 YE Projected	$402	$402	100.0%
2012	$402		

Goal - Number of Curriculum Delivered

Year	Goal	Actual	% of Goal Achieved
2000	-	-	0.0%
2001	-	-	0.0%
2002	38	619	1628.9%
2003	38	696	0.0%
2004	600	830	138.3%
2005	600	974	162.3%
2006*	300	367	122.3%
2007	340	747	219.7%
2008	340	1,574	462.9%
2009	1,074	3,965	369.2%
2010	950	5,271	554.8%
2011	2,000		
2011 YTD (Jun)	2,000	97	4.9%
2011 YE Projected	2,000	2000	100.0%
2012	2,000		

*Curriculum with sign Curriculum Request Agreement (CRA)

The United Illuminating Company
LF-26 Standard Filing Requirement

Program Notes: K - 12 Education

Budget/FTE:

.58 FTE for contract administration, direct contact with education community, oversight of curriculum and implementation strategy and professional development redesigns.

Goal:

Redefined goals reflected in curriculum alignment with CT Department of Education Frameworks

Metric Changes:

Curriculum Units Under Request Agreements	2,000
General/Custom Workshop	20
Educational Outreach Events	15
- Essay Contest, Technical School Outreach, School Assemblies, etc	

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CHAPTER FIVE: FINANCING, LOAD MANAGEMENT, RD&D

Conservation & Load Management Financing Overview

The objective of the Electric and Natural Gas Companies' C&LM Financing programs is to provide attractive financing alternatives to the balance of customer costs not covered by the Fund's incentive. These financing options include referrals to third-party lenders, subsidized low interest third-party loans and subsidized interest-free on-bill financing funded by the Electric Companies (Small Business Energy Advantage ["SBEA"] and Municipal Loan programs) so that customers may easily implement cost-effective energy-efficiency projects. The Companies are also offering subsidized, low interest rate loans with on-bill repayment to Residential customers.

Commercial and Industrial Sector

The Electric Companies' zero percent, on-bill financing for the SBEA program has been extremely successful and is recognized as a strong business model by other utilities. The Companies expect continued strong customer participation in the SBEA program due to this financing option. The SBEA financing model is very simple, easy to explain to customers and is sold directly to the customers through the SBEA contractors. Additionally, the default rates have remained low (less than 1percent) despite the current economic environment. In addition, this current financing model has been adopted for Municipalities and is instrumental for facilitating project implementation, especially when funding is scarce. In 2012, the SBEA program will expand to offer interest free on-bill repayment for energy efficiency projects that include gas savings measures.

In 2009, the Electric and Natural Gas Companies implemented several variations of third-party financing in the Commercial and Industrial sector to grow customer interest and improve implementation. Customer acceptance of this C&I loan program (Energy Opportunities) was limited due to having to sacrifice a portion of the project incentive to obtain the lowest possible interest rate. In 2010, the EDCs modified the loan offerings by subsidizing the loan interest rate to approximately 7 percent. This higher rate was established because the loan gave the customer access to the full project incentive available, in addition to the possibility of achieving positive cash flow. A 2.99 percent loan package was also developed for qualifying projects that replaced T12 or High Intensity Discharge (HID) lighting systems. The 2010 changes have resulted in a higher volume of program activity in both 2010 and 2011. The Companies continue to strive to offer positive cash flows to their financing customers. The loan programs are summarized below.

Loans for the Commercial and Industrial Sector

1. The Small Business Energy Advantage & Municipal Program offers:
    a. Zero percent, on-bill loan repayment to small businesses that participate in the Electric Companies' SBEA program.

b. Zero percent, on-bill loan repayment to municipal customers who participate in either the SBEA program or the Energy Opportunities program.

c. Zero percent, on-bill repayment to customers installing energy efficiency projects that include gas measures.

2. The Small Commercial & Industrial Loan Program offers:

   a. Reduced interest-rate loans through a third-party financing entity.

   b. Customer loans ranging from $2,000 to $250,000 through a third-party lender, with the Electric and Natural Gas Companies providing various subsidized loan options on the first $100,000 of the loan amount.

3. The DPUC C&I Loan Program offers:

   a. Low-interest DPUC-subsidized financing for energy efficiency projects costing more than $1,000,000.

4. The Hospital Loan Program offers:

   a. Connecticut Hospital Association Trust loans for participating eligible health care facilities. In 2012, CL&P is including CHA Administration expenses in its financing budget to allow this program to continue to provide its revolving loan fund.

Residential Sector

The Electric and Natural Gas Companies provide attractive third-party consumer financing for energy improvement projects recommended through the Home Energy Solutions ("HES") program.

The Companies ran a Residential Financing Pilot program from June 1, 2010 through May 31, 2011. The pilot program offered loans at attractive, below-market interest rates. The pilot also allowed the companies to engage customers and contractors in a new way by reducing one of the barriers to implementing deeper energy efficiency. The Residential Financing Pilot program successfully funded loans to over 1,250 customers representing over $14.5M in energy efficient home improvements.

Although the pilot was successful, the cost to the Fund was high due to the capital source used by the Third Party financing vendor. The Companies, in conjunction with the EEB, sought alternative financing models to reduce the cost to the Fund. On June 1, 2011 the Companies introduced a new residential loan program by offering subsidized, low interest rate loans with on-bill repayment to HES residential customers who make qualified energy efficiency improvements to their homes. This program will be one of the first in the nation to offer on-bill repayment of energy efficiency measures for residential customers.

CL&P's new residential loan program is also administered by CHIF and the Connecticut Energy Efficiency Finance Company ("CEEFCO"), a 501 (c)(3) Special Purpose Entity set-up to administer the

loan program and leverage Connecticut Energy Efficiency Fund monies. UI's residential loan program is administered by CHIF and funded by utility capital.

To qualify for the interest rates below and obtain a loan, a customer must participate in the Home Energy Solutions Program (HES) through a Connecticut Energy Efficiency Fund approved HES contractor. All measures or equipment financed must meet the criteria set forth below including the Home Energy Solutions (HES) participation criteria and the Connecticut Energy Efficiency Fund rebate and criteria where noted. Customers are eligible for a minimum loan amount of $2,500 to a maximum amount of $20,000 with a maximum loan term of ten years.

If 4.99 percent and 2.99 percent measures are bundled together, the entire package qualifies for 2.99 percent (with the exception noted below for oil or propane heated homes).

Measures that have unproven or questionable savings (including but not limited to fuel oil catalyst products, radiant barriers, and power correction devices) will NOT be financed.

100% of work being done shall apply to qualifying measures as listed below. Non-listed work directly related and necessary to the installation of the listed qualifying measures may be financed along with the qualifying measure at the applicable interest rate.

Advanced air sealing and/or duct sealing can be financed only when air sealing or duct sealing is necessary to increase the energy efficiency of the qualifying measure. The interest rate is set based on the qualifying measure installed.

Qualifying Measures and Requirements for 2.99%

Measure	HES	Efficiency Requirements	Additional Criteria	Other
High Efficiency Insulation For Natural Gas or Electric heated homes	✓	• Ceilings with less than R-30 insulation must install a minimum of R-19 and the final R-value of the ceiling must be equal to or greater than R-38 • Walls that have no insulation or an R-value of 4 or less must install a minimum of R-13	• Insulation applies to above grade walls or ceilings as part of the homes conditioned envelope • Basement ceilings, below grade walls, or insulation installed within interior walls **do not** qualify • Accepted insulation materials: fiberglass batts, blown-fiberglass, cellulose, dense pack cellulose, spray foam or rigid foam or rigid spray foam products	• Oil or propane heated homes in CL&P service territory will be financed at the current market rate. See below.
ENERGY STAR® Ductless Heat Pumps	✓	• Ductless Heat Pump must be AHRI rated and ENERGY STAR qualified • Must meet or exceed: 14.5 SEER, 12 EER, 8.2 HSPF	• Must meet Energy Efficiency Fund equipment performance criteria for the $1,000 incentive level • Must be installed in a zone that has electric resistance heat as the primary source of heat	
ENERGY STAR Electric Heat Pump Water Heaters	✓	• Must meet or exceed: Energy Factor (EF) of 2.0 or greater	• Replacement of an operating electric resistance hot water heater with ENERGY STAR Electric Heat Pump Water Heater	
ENERGY STAR Tankless Natural Gas Hot Water Heaters	✓	• ENERGY STAR Tankless Natural Gas Water Heater 0.82 EF or greater with Electronic Ignition • High Efficiency Indirect Water Heater attached to a natural gas ENERGY STAR qualified boiler (85% AFUE or greater)	• Replacement of an operating hot water heater	

Qualifying Measures and Requirements for 4.99%

Measure	HES	Efficiency Requirements	Additional Criteria	Other
ENERGY STAR Central Air System	✓	• Must meet or exceed: 14.5 SEER, 12 EER	• Replacement of an operating Central Air Conditioning system • Participate in Energy Efficiency Fund High Efficiency Heating and Cooling System Rebate • Must meet the Energy Efficiency Fund Quality Installation and Verification Program criteria	
ENERGY STAR Air to Air Heat Pump	✓	• Must meet or exceed: 14.5 SEER, 12 EER, 8.2 HSPF	• Replacement of an operating electric resistant heat, electric furnace or air to air heat pump system • Participate in Energy Efficiency Fund High Efficiency Heating and Cooling System Rebate • Must meet the Energy Efficiency Fund Quality Installation and Verification Program criteria	
ENERGY STAR Natural Gas Furnaces and Boilers	✓	• Furnace: AHRI rated 92% AFUE with Air Handler Performance Level EAE of 2% or lower • Boiler: 90% AFUE or greater with temperature reset or purge control	• Replacement of an operating heating system	
Windows (Natural Gas and Electric heated homes only)	✓	• Must have: ENERGY STAR U-factor < or = 0.30	• Must replace single-pane (no storm) windows • Applies to existing window(s) part of the primary building envelope only	• Basement and attic windows (in unheated areas) do not qualify • Garage windows (in unheated areas) do not qualify

Qualifying Measures and Requirements for Market Rate[1]-(CL&P Customers only)

Measure	HES	Efficiency Requirements	Additional Criteria	Other
High Efficiency Insulation (Oil or Propane heated homes)	✓	• Ceilings with less than R-30 insulation must install a minimum of R-19 and the final R-value of the ceiling must be equal or greater than R-38 • Walls that have no insulation or an R-value of 4 or less must install a minimum of R-13	• Insulation applies to above grade walls or ceilings as part of the homes conditioned envelope • Basement ceilings, below grade walls, or insulation installed within interior walls **do not** qualify • Accepted insulation materials: fiberglass batts, blown-fiberglass, cellulose, dense pack cellulose, spray foam or rigid foam or rigid spray foam products	
ENERGY STAR Oil or Propane Furnaces and Boilers	✓	• Oil Furnace: 85% AFUE with Air Handler Performance Level EAE of 2% or lower • Propane Furnace: 92% AFUE with Air Handler Performance Level EAE of 2% or lower • Oil Boilers: 85% AFUE with temperature reset or purge control • Propane Boiler: 90% AFUE with temperature reset or purge control	• Replacement of an operating oil, propane, or electric resistance furnace or boiler system	
Geothermal Systems	✓	• GLHP Closed Loop Water to Air 17.1 EER, 3.6 COP • DX Direct Expansion Refrigerant 16.0 EER, 3.6 COP • Water to Water 16.1 EER, 3.1 COP	• A Geothermal Prequalification Application must be submitted to the electric utility and approved by the Geothermal Project Coordinator (Visit http://www.cl-p.com/home/saveenergy/rebates/heatpumprebate.aspx for an application)	
Windows (Oil or Propane heated homes)	✓	• Must have: ENERGY STAR U-factor < or = 0.30	• Must replace single-pane (no storm) windows • Applies to existing window(s) part of the primary building envelope only	• Basement and attic windows (in unheated areas) do not qualify • Garage windows (in unheated areas) do not qualify

[1] The current market rate is 9.25% (June 1, 2011).

The Electric and Natural Gas Companies now offer their entire customer base a broader portfolio of loan options that consists of Fund program offerings and other established loan offerings. The loan programs are summarized below.

Loans for the Residential Sector

1. The Energy Conservation Loan Program (ECL) and the Multifamily Energy Conservation Loan Program (MEL) provide financing at below market rates to single family and multi-family residential property owners for the purchase and installation of cost-saving energy conservation improvements. The program is administered by the Connecticut Housing Investment Fund, Inc. (CHIF) with funding from the Connecticut Department of Economic and Community Development (DECD). Loans are available for Single family (1-4 units) homeowners may borrow up to $25,000 and multi-family property owners may borrow up to $2,000 per unit (a maximum of $60,000 per building) for a period of 10 years for eligible improvements.

2. HES offers subsidized, low interest rate, unsecured loans with on-bill repayment through either utility company capital or Fund capital. CHIF is administering the Residential Loan Program on behalf of the Companies.

Financial/Incentive Strategy Development

In response to the suggestions and direction provided by the Department during recent years, the Electric and Natural Gas Companies have worked closely with the EEB's Residential and C&I Committees to systematically review the C&LM program incentives, finance offerings and assessment of market-driven opportunities for leveraging Fund dollars and enhancing financial offerings under the current program structure. The Electric and Natural Gas Companies continue to work with the EEB and its committees to further develop the C&LM financing strategy by examining other innovations, initiatives, practices, tools and private and public resources. This process is ongoing and is expected to allow the C&LM programs to further develop and enhance the financing options each year. These efforts include:

- ongoing meetings and consultations with the EEB's committees throughout the remainder of 2011 and 2012, recognizing that the revamped financial offerings noted above are just the next step in enhancing program success rates and cost-effectiveness;
- cooperation/coordination with the EEB and other parties to research innovative financial mechanisms, capital investment pools, public and private educational and technical resources, energy service performance contracting, positive cash-flow financial mechanisms, energy service agreements, etc.; and
- utilization of national and regional experts in innovative financing for energy-efficiency and load management.

It is anticipated that these ongoing efforts will allow the C&LM programs to continue to improve and enhance its programs and financial offerings, noted above. The Companies and the EEB will periodically report to the Department on the progress of this effort and solicit its input.

C&LM Financing – Small Business/Municipal Loan Program (Electric & Gas)

Objective:

The objective of the Electric Companies' C&LM Financing program is to provide attractive financing options to a broader base of the C&I sector that includes small businesses and municipalities, enabling those customers to implement cost-effective energy efficiency projects in conjunction with the existing incentive offerings.

Target Market:

The primary target market consists of two distinct groups of commercial and industrial customers: small businesses and municipalities within the Electric Companies' service territories. Electric and gas energy efficient improvements are eligible for financing. The Companies have modified their definition of "small business" in order to increase service to smaller mid-size customers. The Companies define small businesses as those customer accounts that experience a 12-month average peak demand of up to 200 kW as the maximum criteria. Municipal customers are a well-defined group that includes all of the accounts paid for by municipal governments.

Program Description:

Many obstacles must be addressed en route to educating these customers as to the benefits of energy efficiency. These obstacles include financial limitations, time constraints, decision-making policies, and a general lack of awareness of the benefits of energy-efficient measures. Offering a financing option such as this program to qualified customers mitigates some of these obstacles, allowing customers to participate and enhance their operations by reducing energy costs.

This financing program is designed to supplement the existing incentive structures by offering interest-free financing to small businesses and municipalities, as ordered by the Department in its May 28, 2003 Decision in Docket No. 03-01-01. This mechanism enables the Electric Companies to offer financing to qualifying customers in an aggregate amount greater than would be possible if only Fund revenues were used as the source of funds.

The Electric Companies provide the capital to make loans to customers and charge the Fund only for certain costs related to the financing. First, the Fund is the source of interest payments, which are made to the Electric Companies on the aggregate principal amount of loans outstanding at an annual rate equal to each of the Companies' weighted cost of capital. For purposes of this program, the applicable interest rate for new loans is reviewed from time to time (at least once a year) and adjusted as appropriate. Second, unlike other financing programs that would terminate electric services for nonpayment of loans, the Fund is also used to compensate the Companies for any defaulted and charged-off loans. The amount of such compensation is limited to the outstanding principal balance of the customer's loan.

The Electric Companies have received the Department's approval, under CGS §16-43(b), to lend monies to qualified customers on the terms and conditions described in the section headed "Incentive Strategy" below, including the provision of loans with repayment periods of one year or more.

Marketing Strategy:

The C&LM Financing program is marketed to eligible small business and municipal customers through marketing channels that are currently used in other Fund programs. The primary marketing techniques involve direct customer contact.

Incentive Strategy:

The Electric Companies offer a combination of incentives and interest-free financing that facilitate reduction of the customer's share of project costs. The interest-free finance payments are billed to customers as a line item on their electric bills.

The terms and conditions of the C&LM Financing program include the following:

1. Maximum cumulative amount outstanding (between small businesses and municipality projects) is $30 million over three years for CL&P projects and $7.5 million over three years (beginning Sept. 2, 2009) for UI projects.
2. Maximum term for loans is 48 months.
3. The maximum dollar amount eligible for financing is $100,000 per project for both CL&P and UI projects. It should be noted that the Companies also utilize capping criteria based on a gross maximum dollar amount for total amounts financed per municipality.
4. The minimum dollar amount eligible for financing is $500 per project. If the amount is less than $500, it defaults to a one-time receivable.
5. The Electric Companies provide the capital for funding principal for the loan.
6. Interest is paid to the Electric Companies at the Department-approved weighted average cost of capital from Fund monies.

Goals:

The primary goal of this program is to provide small business financing to a broader base of C&I customers while achieving the same customer response as was achieved with the previous program offerings. For municipal customers specifically, the goal is to create general awareness and acceptance of this program. Controls are in place to ensure the amount of outstanding loans in any given year will not exceed the maximum cumulative outstanding balance as noted above nor exceed one-third of the Electric Companies' total Fund budget.

New Program Issues:

Municipalities that participate in current C&LM retrofit programs are eligible for financing, provided they meet the qualifications. In response to the Department's request, the Electric Companies addressed the legal issues surrounding the financing proposal in briefs submitted to the Department on Oct. 1, 2003.

The Companies have incorporated gas measures for 2012 and are working on offering the zero percent (0%) financing or "on-bill" repayment for those measures. In addition to the electric measure financing already offered.

There exist a couple of options for implementing on – bill financing for combined gas and electric measures. The first option is one we feel is the most practical. It allows the EDCs to provide on - bill repayment installments for both the electric and gas measures on the electric bill and then "charge back" the costs for the cost of the measures, the interest rate buy down and any loan defaults to the gas utilities. This first option is similar in methodology to that which was approved by the DPUC for Residential financing in its final decision under Docket #10-10-03. A second option is to create two loans for one project, one loan for the electric portion and one for the gas. This option may be confusing to customers by having one project summary document with two loans. In addition, there are logistical issues when the companies are not owned by the same parent company. As an example, CL&P can create on on-bill loan for CL&P and YGS; However, CL&P cannot create an on-bill loan for CL&P and CNG or SCG). UI is in the same situation when serving the customer that utilizes Yankee gas in its territory. It should be noted that in Massachusetts, the EDCs have been proceeding with a similar methodology with a relatively small list of prescriptive type measures. The electric utility pays the entire incentive and then invoices or "charges back" the gas company for its prescriptive incentive. Then the electric utility invoices the company for the entire customer balance (electric and gas customer costs). The electric utility does not charge the gas utility for the interest rate buy-down on the gas portion and the electric energy efficiency fund assumes the entire default rate risk.

Customers that do not qualify for interest-free financing through the SBEA program now may be eligible for alternative financing options through a third-party vendor. These financing options are generally expected to take the form of zero or low-interest rate loans.

Company Issues:

In addition to the municipal and small business sectors, the Electric Companies will continue extending financing to larger qualified C&I customers who participate in current C&LM retrofit programs in 2012. (The section on "New Program Issues" for C&I Energy Efficiency Financing program provides specifics.)

UI Specific Issues:

For 2012, the Company plans on modifying its financing eligibility requirements for the larger projects. The planned modification will require customers seeking loan amounts greater than $45,000 and loan terms of 48 months to be verified through an external resource such as Dunn & Bradstreet. This plan will further protect the SBEA program and the fund from increased occurrences of delinquency.

C&LM Financing - C&I Energy Efficiency Financing Program (Electric & Gas)

Objective:

The objective of the C&I Energy Efficiency Financing program is to provide third-party financing for customers who would otherwise find it difficult to fund energy-efficient measures.

Target Market:

Commercial, manufacturing and industrial electric customers operating within the last three years and having a 12-month peak demand averaging greater than 10 kW are the target market groups. In addition to be eligible for financing any gas measures, a customer needs to be a firm gas customer. Financing is available for projects that include either gas or electric energy efficient measures or both. Customers utilizing fossil fuels other than natural gas would only be eligible for electric incentives.

Program Description:

Existing industrial, manufacturing and commercial businesses operating within the Electric and Natural Gas Companies' (the "Companies") combined service territories are eligible for this program. To qualify, an industrial/manufacturing customer must have had an average monthly demand greater than 10 kW the past 12 months. Businesses must have been in existence for three years and qualify through a third party business credit review.

Qualified customer projects are eligible for interest-free third-party loans ranging from a minimum of $2,000 to a maximum of $100,000 for energy-efficient retrofits and / or equipment replacements. The Electric and Natural Gas Companies will continually evaluate these amounts based on program participation, customer need and cost effectiveness. Application requirements are made through account executives, program administrators, the customer, or the customer's contractor. The Companies provide program support and quality assurance throughout the process. Customers may receive loans of up to $100,000, with low interest-rates from 5 - 10 percent in addition to the EEF-calculated program incentive are also offered to customers. However, the total subsidy is capped at 112.5 percent of the calculated incentive. The term for this loan is limited to five years. A blended-rate loan is available to customers if they choose to accept the Energy Efficiency Fund-calculated program incentive for finance amounts between the $100,000 limit (subsidized) and up to $250,000 (unsubsidized).

A third party provides loans and assumes all risks associated with repayment. The subsidized interest portion of the loan is funded by a Fund contribution (included as a program budget line item) that buys down the interest rate to below market rates. This program is not applicable to new construction or major renovation projects, federal projects, or SBEA (and Municipal) projects that qualify and accept interest-free financing under the Companies' existing C&LM financing program. It should be noted that if an SBEA or Municipal project were on an "incentive only" basis and did not proceed with the C&LM

Small Business and Municipal Loan program financing offering, such a project would be eligible to pursue this loan offering in which case the interest rate for the loan would either be 0 percent or a low rate. The maximum loan payment period is five years, or 60 months (based on a simple payback).

Marketing Strategy:

This program seeks to encourage a higher market penetration of energy-efficient equipment by providing financing designed to supplement other program incentives for C&I customers. Eligible customers involved with Fund C&I programs will be advised of loan participation requirements upon qualification of their intended conservation projects.

New Program Issues:

In addition to the Municipal and Small Business sectors, the Electric and Natural Gas Companies are looking to extend financing to larger qualified C&I customers who participate in current C&LM retrofit programs in 2012. Financing for these customers would be via one or more third parties or other sources of capital, with the Companies offering a subsidized low-interest or zero- interest-rate buy-down or subsidy funded by the Fund. This financing option would only be available for eligible retrofit or equipment-replacement projects. The companies plan to issue an RFP in late 2011 for the 2012 - 2013 program years.

Eligibility guidelines for this type of loan are as follows:

1. The project must meet eligibility criteria for Energy Opportunities, Operation and Maintenance or Energy Conscious Blueprint programs.
2. State, municipal or small business projects not qualifying for other Fund financing or initiatives are eligible.
3. Any Federal, State, or Municipal project not qualifying for or not involved with an Energy Savings Performance Contract.
4. The loan must not be for a new construction or major renovation project.

The Companies are investigating ways to expand the loan offering which allows customers implementing natural gas measures to take advantage of the C&I Financing option.

In addition, the Companies also plan to explore options to close the gap between the current third party maximum threshold for loans of $250,000 and the $1 million loan option available through the Department. One way to achieve this could be by working through an additional third-party lender or lenders who would provide this increased financing to bridge the gap because the Companies do not typically see a high volume of loans in this dollar range. Such projects are normally addressed on a case-by-case basis. This will be addressed in the RFP which is planned to be issued in late 2011.

Residential Energy Efficiency Financing (Electric and Natural Gas)

Objective:

The Residential Energy Efficiency Financing offered for 2012 utilizes successes learned from the pilot loan program that was offered in 2010 – 2011. The new loan program approved by PURA was developed through a collaborative process between the Companies and the EEB Consultants. These low interest rate loans finance both electric and gas energy efficient measures.

The Electric and Natural Gas Companies developed a pilot loan program for residential customers that began June 1, 2010 and ceased May 31, 2011 with the objective of providing third-party financing to encourage homeowners to install energy efficient home improvements to achieve deeper energy savings.

The Companies began offering their new approved financing programs on June 1, 2011 with the objective of providing convenient repayment options and low interest rate financing to homeowners installing energy efficient home improvements. The financing programs that the Companies are offering are more cost effective to the Fund than the pilot program that ran through May 31, 2011.

Target Market:

Participants in the HES program, with an emphasis on HES–Home Performance participants who wish to upgrade their homes with energy efficient improvements.

Program Description:

The financing program offered for 2012 implements a number of improvements over the pilot program that was offered in 2010 -2011. In particular, the new loan program utilizes the Connecticut Energy Efficiency Fund more cost effectively than the pilot loan program.

The pilot loan program offered low interest rate financing (2.99 percent for projects from $2,000 to $6,999 and 0 percent for projects from $7,000 to $20,000) for qualifying residential energy efficiency projects. The program offered unsecured, third party loans through AFC First Financial Corporation ("AFC") and was introduced to the HES vendors and an existing group of qualified AFC contractors on June 1, 2010. The source of capital to AFC for these residential loans was Fannie Mae, whose applicable interest rate was 14.99 percent. The Companies used the Connecticut Energy Efficiency Fund to buy down the interest rate to either zero percent or 2.99 percent through April 2011, then 2.99 percent and 4.99 percent from April through May 31, 2011. While the cost of the interest rate buy-down was expensive, the pilot loan program was very successful in attracting a large number of homeowners who implemented energy efficiency measures and improved vendor project recommendation success rates. The Companies attribute some of the high volume of the loan program to the HES and non-HES vendors who used the loan program successfully and made it part of their sales process. The pilot

program offered streamlined loan processing that made it easy for homeowners and vendors to participate, achieving one of the major objectives of the pilot.

Measures allowed for the pilot financing program included a broad array of upgrades that included central air conditioning, replacement heating systems, insulation, heat pumps, and hot-water heaters. Fannie Mae assumed the risks associated with repayment. The Electric and Natural Gas Companies provided program support and quality assurance.

Throughout the pilot loan program year the Companies, in conjunction with the EEB, assessed and researched other financing opportunities hoping to secure an option that would result in more cost-effective programs. The Companies also worked closely with the EEB Consultants to ensure that approved measures qualifying for Fund subsidy have effective energy efficiency savings. Some of the financed measures that were approved under the pilot program are no longer allowed under the new Residential Financing program.

As of June 1, 2011, CL&P provided $6 million of 2010 Fund carry-over to CEEFCO. CEEFCo, a 501(c)(3) Special Purpose Entity, was set-up to administer the loan program and leverage Connecticut Energy Efficiency Fund monies to attract private capital and make a sustainable financing model into the future. CHIF will provide all necessary services to CEEFCo. The unsecured, subsidized loans are being offered for approved measures at 2.99% and 4.99%, while energy efficiency upgrades for oil or propane are set at market rate. Loans are made between $2,500 and $20,000 and borrowers have the option of choosing to repay CHIF directly or to repay their loan on their utility bill.

As of June 1, 2011 UI is making the unsecured, subsidized residential loans for the approved measures, using utility capital, at the same to 2.99% and 4.99% but are not currently offering any financing for oil or propane improvements. All UI residential loan borrowers will repay their loans through on-bill repayment.

In 2012, the Companies and the EEB will monitor customer buy-down rates and adjust them accordingly in order to serve more customers and provide financing solutions while utilizing ratepayer dollars to their maximum advantage.

Marketing Strategy:

The programs (pilot program and the new Residential Financing programs offered by the Companies) are aimed at encouraging a higher market penetration of energy-efficiency measures in the residential sector (e.g., insulation, heat pumps, water heaters, boilers and furnaces and AC upgrades) by providing financing that supplements the HES incentives. Customer interest will be generated through the creation and distribution of marketing materials and by briefing vendors on the program benefits.

New Program Issues:

The estimated loan volume in the new loan program has not been realized. The Companies believe the low loan volume is a result of the changes to the measures that can be financed in the new program. The approved measures for the new financing program properly incent the home owner to make the most cost effective, deeper energy efficient improvements to their home.

Public Act 11-80 calls for residential customers who heat with electricity to be able to finance and receive incentives to help switch to energy efficient natural gas or fuel oil furnaces and boilers.

The Companies are poised to collaborate with DEEP to establish a program that would promote and encourage residents to choose energy efficient heating equipment.

CL&P Standard Filing Requirement

Residential Loan Fund (Includes ECLP)

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals		Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:									
NU Labor	$ -	$ 10		$ 30	$ -	$ 33	$ 35		$ 35
Contractor Staff	$ -	$ -		$ -	$ -	$ -	$ 3		$ 3
Total Labor	$ -	$ 10		$ 30	$ -	$ 33	$ 38		$ 38
Materials & Supplies	$ -	$ -		$ -	$ -	$ -	$ -		$ -
Outside Services	$ -	$ 18,560	b)	$ 3,120	$ 2,410	$ 3,406	$ 2,013	a)	$ 2,135
Incentives	$ -	$ -		$ -	$ -	$ -	$ -		$ -
Administration	$ -	$ 0		$ -	$ -	$ -	$ -		$ -
Other	$ -	$ 0		$ -	$ 2	$ 2	$ -		$ -
Total	$ -	$ 18,570		$ 3,150	$ 2,412	$ 3,441	$ 2,051		$ 2,173

a) Includes subsidies to buy-down interest rates as well as the Energy Conscious Loan Program with the Connecticut Housing Investment Fund (CHIF) and Neighbor-to-Neighbor (N2N) costs of $152K ($452K over three years)

b) Includes $15M reserve for Residential Financing Program (addressed in Docket 10-10-03-RE01)

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Residential Loan Fund (Include ECLP)

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ 9,950	$ 28,614	$ 12,976	$ 28,614	$ 30,045	$ 31,547
Contractor Staff	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor	$ 9,950	$ 28,614	$ 12,976	$ 28,614	$ 30,045	$ 31,547
Materials & Supplies	$ -	$ -	$ -	$ -	$ -	$ -
Outside Services	$ -	$ -	$ -	$ -	$ -	$ -
Incentives	$ -	$ -	$ -	$ -	$ -	$ -
Marketing	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ 417,814	$ 560,473	$ 216,478	$ 400,000	$ 317,235	$ 297,208
Administrative Expenses	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 427,764	$ 589,087	$ 229,454	$ 428,614	$ 347,280	$ 328,755

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ISO-NE Load Response Program (Electric)

Objective:

The objective of the Electric Companies' ISO-NE Load Response ("Load Response") program is to provide support, financing and technical assistance to facilitate customer participation in the ISO-NE Forward Capacity Market (FCM) via various ISO-NE programs such as: ISO-NE Demand Response Program, Day Ahead Load Response Program (DALRP) and Real-Time Price Response program. Customers who elect to participate in Real-Time Price Response are currently restricted from participating in the FCM by ISO-NE. The Demand Response program mandates load curtailments from customers who enroll and provides enhanced system reliability during peak system load conditions. The Price Response program helps to mitigate high Locational Marginal Prices throughout the year.

Target Market:

C&I customers and their affiliates capable of reducing their peak demand by a minimum 100 kW of load, either at a single site or in the aggregate for multiple facilities, are eligible for the program. The Demand Response portion of the program is accepting new enrollments to the Forward Capacity Market ("FCM) to maintain our current commitments.

Program Description:

Enrollment in the Load Response program peaked in 2009 following significant growth fueled by supplemental capacity payments provided for by the Energy Independence Act of 2005. Among the many changes and challenges brought about by the FCM was the realization that many customers would not be economically viable participants in the Load Response program in 2010 and beyond.

The primary impact from the transition to the FCM is the price of capacity. The FCM is a forward looking market, and auctions have already been held for 2012, 2013, and 2014. As a result of this competitive auction process, the price of capacity has been driven down and in 2012 customers can expect to receive approximately $35 per kW per year. The FCM also limits the amount of emergency generation capacity that may be purchased by ISO-NE, further reducing payment for those customers to $30 per kW per year. Additionally, in 2012 the *Reserve Margin Gross-up* once paid to Demand Resources to compensate them for avoided Reserve Requirement costs will be eliminated by ISO-NE. Other impacts from the FCM include complex measurement, performance, availability and settlement rules that adversely impact customers

Marketing Strategy:

The Companies promote the Load Response program through customer seminars as required and also engage customers through direct sales and service calls. Follow-up meetings to review detailed customer load analysis are also employed. These targeted customer outreach efforts assist in

minimizing attrition but do not yield significant growth. The reason for those customers willing to continue to participate in the Load Response program is for corporate goodwill and the desire to maintain grid reliability. A focus of message will need to transition from one of incentives to that of corporate and social responsibility.

Incentive Strategy:

Under the Load Response program, capacity payments are provided by ISO-NE through the FCM. The Electric Companies expect the program to continue to be funded out of FCM revenues.

UI Specific Issues:

Since June 1, 2010, UI operated this program as a market-based program subject to the terms of ISO-NE Market Rule 1. As of January 1, 2012, UI will operate the Load Response Program as part of its existing Energy Efficiency Fund program offerings. Funding for this program is provided by revenues received from the Forward Capacity Market. UI will use the revenues from the FCM to pay for customer incentives (for participation and response to ISO-NE Demand Response Events), ISO-NE data telemetry requirements, marketing, and administrative labor associated with the program. The program will be managed by existing C&LM personnel and will be administered subject to the regulations described in ISO-NE Market Rule 1.

UI is closely monitoring additional changes to the FCM currently being considered by ISO-NE. These changes are a result of FERC Order 745, which requires RTO's to allow Demand Response Resources to receive full Locational Margin Price payments for participation in the Day Ahead and Real-Time Energy Markets. ISO-NE has interpreted FERC directives in this Order as a mandate to require all Demand Response Resources with a commitment in the FCM to participate in the ISO-NE Energy Markets. This decision will subject Demand Response Resources to further risks and penalties previously incurred only by Generation Resources. This will also result in Demand Response Resources being dispatched based on clearing price rather than during electric system emergencies.

CL&P Specific Issues

Since June 1, 2010, CL&P has operated this program as part of the existing Load Response program in its Energy Efficiency Fund program offerings. However, the revenues needed to fund this program now come from the Forward Capacity Market. CL&P will use the revenues from the FCM to pay for customer incentives (for participation and response to ISO-NE Demand Response Events), Internet-based communication system services, marketing, and administrative labor associated with the program. The program will be managed by the existing C&LM personnel and will be administered subject to the regulations described in ISO-NE Market Rule 1.

CL&P Standard Filing Requirement

Load Management

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 89	$ 241	$ 500	$ 226	$ 500	$ 342		$ 342
Contractor Staff	$ -	$ 92	$ 173	$ -	$ -	$ 94		$ 94
Total Labor	$ 89	$ 332	$ 673	$ 226	$ 500	$ 435		$ 435
Materials & Supplies	$ 1	$ 0	$ 5	$ 1	$ 6	$ 5		$ 4
Outside Services	$ 52	$ 457	$ 1,000	$ 385	$ 800	$ 743	a)	$ 637
Incentives (Supplemental Payments)	$ (43)	$ 2,071	$ 1,300	$ 2,207	$ 2,997	$ 2,295	b) c)	$ 1,967
Marketing	$ -	$ -	$ 10	$ -	$ -	$ 10	d)	$ 9
Administrative Expenses	$ 3	$ 2	$ 12	$ 7	$ 17	$ 12	e)	$ 10
Other	$ 0	$ 1	$ -	$ 6	$ 12	$ -		$ -
Total	$ 103	$ 2,864	$ 3,000	$ 2,833	$ 4,332	$ 3,500		$ 3,062

a) Includes communications software usage fees and meter maintenance fees.

b) Incentives (Supplemental payments) are for Demand Response, offset by ISO-NE Transition Period Payments. ISO-NE Transition Period and ISO-NE ODR Payments are increasing, offsetting more of program costs.

c) Incentives paid to customers for facility upgrades that help enable load response.

d) Dollars for providing the participants with the latest program information and refresher training.

e) Employee expenses including mileage, training, conference attendance and misc.

2012 Goals and Metrics Information

Demand Savings (kW Reduction Goal)	100,000
Annual Energy Savings (kWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate ($/kWh)	N/A
Lifetime Cost Rate ($/kWh)	N/A
Electric b/c Ratio	1.0
Total Resource b/c Ratio	1.0

CL&P Standard Filing Requirement

Load Management

Program Costs

Year	Budget	Actual	% of Budget	$/MW
2000	$1,799,000	$ 2,750,000	153%	
2001	$1,270,000	$ 2,750,000	217%	
2002	$1,908,000	$ 1,722,000	90%	n/a
2003	$2,805,000	$ 2,437,000	87%	n/a
2004	$ 350,000	$ 140,000	40%	n/a
2005 Revised	$2,513,893	$ 102,909	4%	$1,694
2006 Revised	$1,400,000	$ 1,241,601	89%	$52,664
2007 Revised	$1,483,167	$ 456,000	31%	$28,500
2008 Revised	$ 480,000	$ 456,025	95%	$26,369
2009 Revised	$ 350,000	$ 102,909	29%	$7,916
2010 Revised	$6,000,000	$ 2,864,264	48%	$24,185
2011 Revised	$3,000,000	n/a	n/a	n/a
2011 YTD (Jun)	n/a	$ 2,833,144	47%	$34,977
2011 Y/E Projected	$3,000,000	$ 4,332,037	72%	$43,320
2012	$1,700,000	n/a	n/a	n/a

/CT Goal - MW Enrollment

Year	Budget	Actual	% of Budget
2002	n/a	n/a	n/a
2003	20	17	85%

WCT Goal - MW Enrollment

Year	Budget	Actual	% of Budget
2002	n/a	n/a	n/a
2003	20	25	125%

Statewide Goal - MW Enrollment

Year	Budget	Actual	% of Budget
2004	16	29.9	187%
2005 Revised	10	61	608%
2006 Revised	32	24	74%
2007 Revised	20	16	80%
2008 Revised	10	17	173%
2009 Revised	10	13	130%
2010 Revised	180	118	66%
2011 Revised	110	n/a	n/a
2011 YTD (Jun)	n/a	81	74%
2011 Y/E Projected	110	100	91%
2012	100	n/a	n/a

Program Ratios

	¡/Lifetime kWh		$/Annualized kW	
Year	Plan	Actual	Plan	Actual
2002	n/a	n/a	n/a	n/a
2003	n/a	n/a	$70	$58
2004	n/a	n/a	$22	$5
2005 Revised	n/a	n/a	$251	$2
2006 Revised	n/a	n/a	$32	n/a
2007 Revised	n/a	n/a	$74	n/a
2008 Revised	n/a	n/a	$32	n/a
2009 Revised	n/a	n/a	$32	n/a
2010 Revised	n/a	n/a	$32	n/a
2011 Revised	n/a	n/a	$32	n/a
2011 YTD (Jun)	n/a	n/a	$32	35
2011 Y/E Projected	n/a	n/a	$32	43
2012	n/a	n/a	$32	n/a

CL&P Standard Filing Requirement

CL&P Program Notes - Load Management

Budget / (FTE)

2.5 FTE for Program Administration

Goal

Not applicable.

Cost/kWh (Cost/Unit)

Not applicable.

Goal Setting Methodology

Not applicable.

Metric Changes

Not applicable.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

ISO-NE Response Program Support

Budget Projections	**2012 Bud**		**2013 Bud**
Labor			
UI Labor	$ 125,000		$ 125,000
Contractor Staff	$ -		$ -
Total Labor	$ 125,000		$ 125,000
Materials & Supplies	$ 5,000		$ 5,000
Outside Services	$ 351,000	a)	$ 276,000
Incentives	$ 878,000	b)	$ 677,000
Marketing	$ 10,000	c)	$ 10,000
Other	$ -		$ -
Administrative Expenses	$ 7,000	d)	$ 7,000
Total	$ 1,376,000		$ 1,100,000

a) Includes communications software usage fees and meter maintenance fees
b) Incentives paid to customers
c) Providing the participants with latest program information and refresher training
d) Employee expenses including mileage, training and conference attendence.

Goals and Metrics Information:	**2012**
Savings	
Demand Savings (kW)	34,000
Cost per kW	$ 40

Research, Development and Demonstration (Electric)

Objective:

The objective of the joint-utility Research, Development and Demonstration ("RD&D") program is the advancement of new energy-efficiency measures and more cost-effective and efficient renewable energy technologies. The program is one in which the Electric Companies jointly participate.

Target Market:

At present the RD&D program is not in a position to accommodate any new clients, since its mandate is currently limited to energy-saving and distributed resource RD&D projects funded in previous years. No new projects will be funded in 2012. However, limited funding may become available for continuation of previously funded RD&D projects.

Program Description:

The RD&D program currently provides engineering and marketing support for previously funded RD&D projects to help them acquire alternative funding, review their reports, and help commercialize their projects to whatever extent possible.

The RD&D program provides on- going technical support of the EEB Roadmap Process, under which new products or technologies submitted to the EEB are evaluated for consideration of their potential inclusion in an existing Fund program. The RD&D program reviews and assesses the feasibility, appropriateness, potential effectiveness and cost effectiveness of each proposed new product or technology and makes resultant recommendations to the EEB. Such reviews are prepared by the RD&D program staff, with input from utility program administrators, EEB consultants, and others as may be appropriate. Review oversight is provided by the RD&D program's Policy Working Group.

Goals:

The goal of the RD&D program is to maximize prior-year investments of RD&D project funding and assist with leveraging of additional funding from other sources for follow-up development and/or commercialization activities.

A second goal of the RD&D program is to provide timely technical reviews of new products or technologies proposed for consideration of their potential for inclusion in an existing Fund program.

A third goal of the RD&D program is to provide technical support and liaison associated with special projects involving new energy efficient technologies.

New Program Issues:

The 2012 RD&D program funding level does not accommodate the RFP solicitation of new energy-saving or distributed resource projects for project funding consideration.

CL&P Standard Filing Requirement

Research, Development and Demonstration

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 73	$ 98	$ 74	$ 50	$ 100	$ 73	a)	$ 73
Contractor Staff	$ -	$ -	$ -	$ -	$ -	$ -		$ -
Total Labor	$ 73	$ 98	$ 74	$ 50	$ 100	$ 73		$ 73
Marketing and Materials	$ -	$ 0	$ 2	$ -	$ 2	$ 2		$ 2
Outside Services	$ 1	$ 0	$ 119	$ 0	$ 106	$ 270	b)	$ 270
Fees and Incentives	$ -	$ -	$ -	$ -	$ -	$ -		$ -
Administrative Expense	$ 2	$ 4	$ 5	$ 2	$ 5	$ 5		$ 5
Other	$ 0	$ 1	$ -	$ 0	$ -	$ -		$ -
Total	$ 75	$ 102	$ 200	$ 52	$ 213	$ 350		$ 350

a) NU Labor in support of the following activities:
Technical review support of the EEB Roadmap Process;
Administration of monthly RD&D Program Policy Working Group (PWG) Meetings;
Technical reviews of new energy efficiency products submitted to C&LM for consideration under existing approved programs;
Participation with external technical working groups associated with emerging technologies, e.g., heat pump water heaters; LED lighting, etc
Technical liaison with external and internal agencies, e.g. Electric Power Research Institute (EPRI); U.S. DOE's National Labs;
Consortium for Energy Efficiency (CEE): Northwest Energy Effiiency Alliance (NEEA); Northeast Energy Efficiency Partnerships (NEEP);
NU's Asset Management Department; NU's Enterprise Planning Department, etc.

b) Engineering consultant(s) due diligence reviews & site visits as required;
Anticipated continuation of one or more previously approved RD&D projects - subject to
RD&D Program Staff, and Policy Working Group (PWG) review, recommendation
and EEB funding approval.

2012 Goals and Metrics Information - The RD&D Program does not have a kW or kWh savings metric.

Demand Savings (kW Reduction Goal)	N/A
Annual Energy Savings (KWh Reduction Goal)	N/A
Lifetime Energy Savings (kWh Reduction Goal)	N/A
Annual Cost Rate ($/kWh)	N/A
Lifetime Cost Rate ($/kWh)	N/A
Electric b/c Ratio	N/A
Total Resource b/c Ratio	N/A

Note: The goal is to maximize prior-year investments of RD&D project funding, and assist with leveraging additional funding from other sources for follow-on development and/or commercialization activities.

CL&P Standard Filing Requirement

Research, Development and Demonstration

Not a goal based program.

CL&P Program Notes - Research, Development and Demonstration

Budget / (FTE)

0.5 FTE for program administration of Research, Development and Demonstration activities

Goal

To maximize prior-year investments of RD&D project funding, and assist with leveraging funding from other sources for follow-on development and/or commercialization
To provide on-going technical review support of the Energy Efficiency Board (EEB) Roadmap process. Technical reviews are provided for evaluation of new products or are submitted to the EEB for consideration of their potential for inclusion in an existing
To provide on-going technical review support for new products or technologies that are su directly to C&LM for consideration of their potential for inclusion in an existing C&LM

Cost/kWh (Cost/Unit)

Not applicable.

Goal Setting Methodology

Not applicable.

Metric Changes

Not applicable.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Research, Development & Demonstration

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ -	$ -	$ -	$ -	$ -	$ -
Contractor Staff	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor	$ -	$ -	$ -	$ -	$ -	$ -
Materials & Supplies	$ -	$ -	$ -	$ -	$ -	$ -
Outside Services	$ 193,877	$ 125,000	$ 10,340	$ 125,000	$ 225,000	$ 225,000
Incentives	$ -	$ -	$ -	$ -	$ -	$ -
Marketing	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ -	$ -	$ -	$ -
Administrative Expenses	$ -	$ -	$ -	$ -	$ -	$ -
Total	$ 193,877	$ 125,000	$ 10,340	$ 125,000	$ 225,000	$ 225,000

CL&P Standard Filing Requirement

Administration

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 709	$ 751	$ 765	$ 389	$ 820	$ 759	a)	$ 759
Contractor Staff	$ 1	$ 22	$ 44	$ 33	$ 47	$ 90		$ 90
Total Labor	$ 710	$ 773	$ 809	$ 423	$ 867	$ 849		$ 849
Materials & Supplies	$ 2	$ 6	$ 8	$ 4	$ 9	$ 4		$ 4
Outside Services	$ 12	$ 32	$ -	$ 7	$ 14	$ -		$ -
Incentives	$ -	$ -	$ -	$ -	$ -	$ -		$ -
Marketing	$ 0	$ -	$ -	$ 1	$ 1	$ -		$ -
Administration	$ 10	$ 11	$ 53	$ 8	$ 57	$ 30	c)	$ 30
Other	$ 14	$ 12	$ 30	$ 5	$ 17	$ 17	b)	$ 17
Total	$ 748	$ 836	$ 900	$ 447	$ 965	$ 900		$ 900

a) Budget includes Business Management FTE's.
b) Budget includes industry association expenses and sponsorship fees.
c) Employee expenses including mileage, training, conference attendance and misc.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Administration

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ 544,738	$ 603,103	$ 264,111	$ 573,103	$ 643,268	$ 675,431
Contractor Staff	$ 4,440	$ -	$ 16,606	$ 30,000	$ -	$ -
Total Labor	$ 549,178	$ 603,103	$ 280,717	$ 603,103	$ 643,268	$ 675,431
Materials & Supplies	$ 37,241	$ 2,500	$ 6,260	$ 6,260	$ 2,500	$ 2,500
Outside Services	$ 136,109	$ 35,332	$ 13,435	$ 27,473	$ 98,532	$ 98,532
Incentives	$ -	$ -	$ -	$ -	$ -	$ -
Marketing	$ 2,656	$ -	$ 1,373	$ 1,373	$ -	$ -
Other	$ 11,113	$ -	$ 2,726	$ 2,726	$ -	$ -
Administrative Expenses	$ 5,386	$ 5,700	$ 4,825	$ 5,700	$ 5,700	$ 5,700
Total	$ 741,683	$ 646,635	$ 309,336	$ 646,635	$ 750,000	$ 782,163

CL&P Standard Filing Requirement

Planning

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget	2013 Budget
Labor:							
NU Labor	$ 491	$ 499	$ 627	$ 276	$ 628	$ 579	$ 579
Contractor Staff	$ 2	$ 3	$ -	$ -	$ -	$ 5	$ 5
Total Labor	$ 493	$ 503	$ 627	$ 276	$ 628	$ 585	$ 585
Materials & Supplies	$ 3	$ 3	$ 6	$ 0	$ 7	$ 6	$ 6
Outside Services	$ 83	$ 47	$ -	$ (11)	$ -	$ 20	$ 20
Incentives	$ -		$ -	$ -	$ -	$ -	$ -
Marketing	$ 4	$ 12	$ -	$ 25	$ 25	$ -	$ -
Administration	$ 12	$ 8	$ 8	$ 3	$ 8	$ 19	$ 19
Other	$ 25	$ 1	$ 9	$ 21	$ 9	$ 20	$ 20
Total	$ 619	$ 573	$ 650	$ 314	$ 678	$ 650	$ 650

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Planning & Evaluation

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ 284,095	$ 303,402	$ 149,066	$ 303,402	$ 311,348	$ 326,915
Contractor Staff	$ -	$ -	$ -	$ -	$ -	$ -
Total Labor	$ 284,095	$ 303,402	$ 149,066	$ 303,402	$ 311,348	$ 326,915
Materials & Supplies	$ -	$ -	$ -	$ -	$ -	$ -
Outside Services	$ 244,673	$ 430,000	$ 79,485	$ 430,000	$ 570,000	$ 570,000
Incentives	$ -	$ -	$ -	$ -	$ -	$ -
Marketing	$ 4,502	$ -	$ -	$ -	$ -	$ -
Other	$ 750	$ -	$ 750	$ 750	$ -	$ -
Administrative Expenses	$ -	$ 5,417	$ -	$ 4,667	$ 5,417	$ 5,417
Total	$ 534,020	$ 738,819	$ 229,301	$ 738,819	$ 886,765	$ 902,332

CL&P Standard Filing Requirement

Evaluation

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget	2013 Budget
Labor:							
NU Labor	$ 98	$ 70	$ 116	$ 56	$ 96	$ 194	$ 194
Contractor Staff	$ 36	$ 36	$ 53	$ 27	$ 44	$ -	$ -
Total Labor	$ 133	$ 107	$ 169	$ 83	$ 141	$ 194	$ 194
Materials & Supplies	$ 25	$ 1	$ 5	$ -	$ 5	$ 5	$ 5
Outside Services	$ 838	$ 1,371	$ 1,616	$ 209	$ 1,345	$ 1,801	$ 1,801
Incentives	$ -		$ -		$ -	$ -	$ -
Marketing	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Administration	$ 2	$ 2	$ 5	$ 0	$ 4	$ 5	$ 5
Other	$ 0	$ 0	$ 5	$ 108	$ 4	$ 5	$ 5
Total	$ 999	$ 1,481	$ 1,800	$ 400	$ 1,499	$ 2,010	$ 2,010

CL&P Standard Filing Requirement

Information Technology

All dollar values are in $000

Budget Projections	2009 Actuals	2010 Actuals	Revised 2011 Budget	2011 YTD (Jun)	2011 YE Projected	2012 Budget		2013 Budget
Labor:								
NU Labor	$ 418	$ 406	$ 745	$ 261	$ 772	$ 550	a)	$ 550
Contractor Staff	$ 68	$ 9	$ -	$ 9	$ -	$ -		$ -
Total Labor	$ 486	$ 415	$ 745	$ 271	$ 772	$ 550		$ 550
Materials & Supplies	$ 82	$ 36	$ 200	$ 29	$ 191	$ 200		$ 200
Outside Services	$ 662	$ 1,349	$ 675	$ 595	$ 699	$ 870	b)	$ 870
Incentives	$ -	$ -	$ -	$ -	$ -	$ -		$ -
Administration	$ 39	$ 10	$ 80	$ 1	$ 83	$ 80	c)	$ 80
Other	$ -	$ -	$ -	$ -	$ -	$ -		$ -
Total	$ 1,269	$ 1,811	$ 1,700	$ 897	$ 1,745	$ 1,700		$ 1,700

a) Includes NU IT labor support charged to C&LM for Day-to-day support of desktop hardware and operating system software, including problem resolution and repairs. Also includes enhancements to existing applications in response to changing busi computing infrastructure; Development of new applications to support new C&LM programs and reporting requirements. The C&LM Tracking and Reporting Initiative is also included.

b) Includes Vendor support to design/build the IT Initiatives.

c) Includes Vendor support coded as software design/build the IT Initiatives.

The United Illuminating Company

EL-25 Standard Filing Requirement

2012

Information Technology

Budget Projections	2010 Act	2011 Revised Bud	2011 YTD (June)	2011 YE Projected	2012 Bud	2013 Bud
Labor						
UI Labor	$ 46,842	$ 48,528	$ 23,900	$ 48,528	$ 49,983	$ 52,482
Contractor Staff	$ -	$ 12,589	$ -	$ -	$ -	$ -
Total Labor	$ 46,842	$ 61,117	$ 23,900	$ 48,528	$ 49,983	$ 52,482
Materials & Supplies	$ 76,286	$ 72,075	$ 37,146	$ 72,075	$ 134,531	$ 134,531
Outside Services	$ 157,379	$ 107,208	$ 94,540	$ 119,797	$ 155,386	$ 152,887
Incentives	$ -	$ -	$ -	$ -	$ -	$ -
Marketing	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ -	$ -	$ 125	$ 125	$ -	$ -
Administrative Expenses	$ 309	$ 2,600	$ -	$ 2,475	$ 2,600	$ 2,600
Total	$ 280,817	$ 243,000	$ 155,711	$ 243,000	$ 342,500	$ 342,500

CHAPTER SIX: BENEFIT COST ANALYSIS (Electric and Natural Gas)

Overview

For the 2012 C&LM Plan, the Electric Distribution Companies (EDCs) and Natural Gas Companies (LDCs) have continued to use similar benefit-cost screening tools within the Conservation and Load Management (C&LM) programs. The screening tools include consistent methodologies and the same sources of avoided costs for the all of the avoided costs modeled. The electric and natural gas avoided costs that are used are based on a regional avoided energy supply cost study ("AECS") completed in 2011 for New England utilities by Synapse Energy Economics[19]. The transmission and distribution (electric) avoided costs are based on studies conducted by the Companies in 2009[20].

For electric program benefit-cost screening, the avoided costs include energy, generation capacity, distribution, transmission and Demand Reduction Induced Price Effect, or DRIPE[21] In addition, non-electric benefits, including fossil fuel savings, water, and non-resource benefits are quantified. For natural gas benefit-cost screening, avoided costs include natural gas, as well as other non-natural gas benefits such as water savings.

The EDCs and LDCs use the Connecticut Program Savings Documentation ("PSD") to document savings assumptions and to highlight 2012 program changes and the results of recent program evaluations. The PSD[22] provides engineering estimates, savings algorithms and measure life estimates used by the Companies within their programs. It also reflects the results of evaluations by providing realization rates to "true-up" savings

Use of common cost-effectiveness testing methodologies and savings assumptions allows the Department of Energy and Environmental Protection (DEEP), the Connecticut Energy Efficiency Board (EEB), and others to compare the benefits, costs, and benefit/cost ratios ("BCRs") of both the EDCs and LDCs on an "apples to apples" basis. All electric and natural gas conservation measures are evaluated within an integrated supply-and-demand planning framework to ensure that the programs are cost-effective and yield positive net benefits to the customers.

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[19] Avoided Energy Supply Costs in New England: 2011 Report, July 21, 2011, Synapse Energy Economics, Inc.

[20] CL&P values based on *Assessment of Avoided Cost of Transmission and Distribution,* ICF International, October 30, 2009. UI values were based The United Illuminating Company Avoided Transmission & Distribution Study, Black & Veatch, October 27, 2009

[21] Demand-Reduction-Induced Price Effects, the reduction in prices in the wholesale energy and capacity markets due to the reduction in energy and demand from conservation programs.

[22] The Companies' PSD is filed annually as part of the Electric and Natural Gas Companies' C&LM Plan. The PSD is a centralized reference of savings (energy, capacity, fossil fuel and other non-electric) assumptions used by the EDCs and LDCs within the programs.

Avoided Energy Supply Cost Study

The majority of the avoided costs used to analyze the cost effectiveness of the efficiency programs have come from a regional avoided energy cost study which was sponsored by program administrators throughout the New England region. This study, *Avoided Energy Supply Costs in New England* (AESC), Synapse Energy Economics, Inc. (Synapse), has been updated on a biennial basis. Starting in 2007 (including 2009 and 2011) Synapse Energy Economics, Inc. provided the studies. In 2011 Synapse was again selected through a competitive bidding process to conduct the study. The results of this study will be used for C&LM benefit cost screening in 2012 and 2013.

For the AESC, the Synapse team modeled Connecticut as three separate geographic electric zones: Norwalk/Stamford region, Southwest Connecticut, and non-Southwest Connecticut. Avoided costs were produced for each of those three zones as well as Connecticut statewide averages. The AESC found that market prices and out-of-market costs varied only slightly across these three sub-areas. Because the values across three zones were found to be nearly identical, the EDCs are using Connecticut statewide average avoided costs. The avoided energy costs from the AESC are approximately 19 percent lower than the comparable values from the last study which was conducted in 2009. The decrease in costs was a combination of lower projected fuel costs and delay in Federal regulation of carbon emissions. The decrease was somewhat offset by higher Renewable Energy Credit (REC) costs.

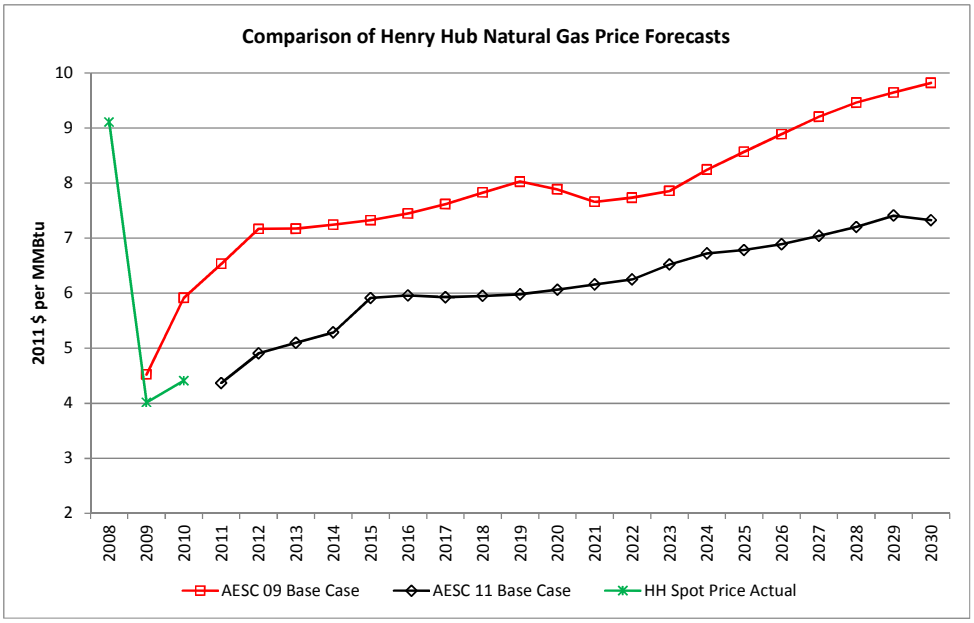
The avoided capacity costs were increased by about 91 percent from the AESC done in 2009. Consistent with the 2009 study the 2011 AESC ties the avoided demand costs to the time the demand gets bid into the FCM. This increase is primarily due to the extension of floor prices through Forward capacity Auction 6 and increase in projected capacity retirement. The retirements in the 2011 study were estimated at about 3,000 MW between by 2020. This was approximately three times the value in the 2009 study. The AESC also quantified a price reduction benefit associated with energy efficiency. The DRIPE benefit is the reduction of energy and capacity market prices that results from reductions in demand as a result of conservation efforts. The Connecticut energy DRIPE values on average were about 18 percent higher than the 2009 AESC. The change was a result of changes in DRIPE dissipation factor offset by lower wholesale energy. The capacity DRIPE for Connecticut was about 370 percent higher than the 2009 study due to the higher projections in capacity prices and a larger DRIPE dissipation factor. The longer dissipation in capacity DRIPE was based upon a detailed analysis of various factors such as: 1) timing of new capacity additions, 2) timing of existing capacity retirement, 3) elasticity of customer demand, 4) the portion of capacity that Load Serving Entities acquire from the Forward Capacity Market.

Table 1: Avoided Cost Comparison for Connecticut

Avoided Cost Comparison (15 Year Levelized Results, 2011$)			
	AESC 2009	AESC 2011	% Change
Avoided Energy Costs	$0.088 /kWh	$0.072 /kWh	-19%
Avoided Capacity Costs	$25.15 /kW-yr	$48.09 /kW-yr	+91%
Avoided energy DRIPE Cost	$0.015 /kWh	$0.018 /kWh	+18%
Avoided Capacity DRIPE Cost	$6.57 / kW-yr	$30.72 / kW-yr	+370%

The 2011 average avoided cost of natural gas decreased about forty percent from the 2009 AESC. Figure 1 compares the 2011 AESC forecast with the 2009 AESC forecast. The lower avoided natural gas costs are attributed mainly to the forecast of lower Henry Hub natural gas prices.

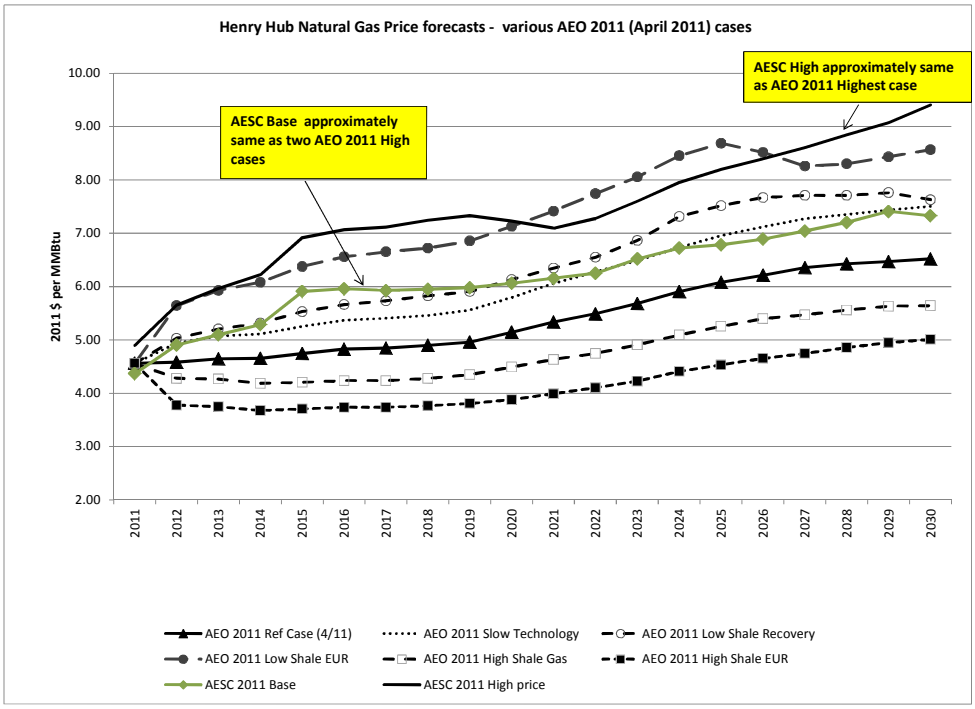
Figure 1[23]: Comparison of Henry Hub Gas Price Forecasts – AESC 2011 vs AESC 2009 ($2011 $/MMBtu)



This lower Henry Hub prices were primarily driven by the availability of shale gas resources. The difficulty in forecasting the cost and availability of Shale gas resources led to some disagreement within the study group. In particular, some members of the study group thought that future regulatory costs were not properly accounted for in the Synapse forecast. The natural gas forecast is dependent on the production and cost forecast of shale gas. The graph in Figure 2 shows a comparison between the AESC estimates and other references. Figure 2 shows that the AESC base case is consistent with two of the high price cases from Annual Energy Outlook (AEO) 2011.

[23]AESC Exhibit 1-14

Figure 2[24]: Comparison of Henry Hub Gas Price Forecasts – AESC 2011 vs AEO 2011 ($/MMBtu)



Benefit-Cost Tests

For the analysis of the proposed 2012 C&LM Plan programs, the Electric and Natural Gas Companies used the same two tests: the **Utility Cost Test**[25] and the **Total Resource Test**. The Utility Cost Test compares the present value of utility-specific program benefits to the "utility cost", or program cost, of the program. For electric-benefit cost testing, the Utility Cost Test includes electric benefits and electric program costs. For natural gas, the Utility Cost Test compares the value of natural gas benefits with the natural gas program costs.

In the simplest sense, the benefit of an efficiency measure is the net present value of the avoided costs (i.e., value of the savings in 2012 dollars) associated with the net savings of that measure over the life of the measure. The savings is the "net savings," as defined in the PSD. Therefore, the savings includes impact factors and realization rates that result from evaluation studies. Likewise, the life (in years) of a measure is defined in the PSD and is based on either the technical life of the measure or study results.

For electric measures, the electric benefit is broken into four main components: (1) the energy benefit; (2) the avoided generation capacity; (3) avoided transmission and distribution; and (4) Demand

[24] AESC Exhibit 1-16

[25] The Utility Cost Test is referred to as the Electric System Test (for electric conservation programs) or the Gas System Test (for natural gas conservation programs).

Reduction Induced Price Effect (DRIPE). The total electric benefit for a measure is the net present value of these avoided costs taken over the life of the measure.[26] The benefits for Load Response program are assumed to be equal to the revenues collected from ISO New England from that program. For natural gas measures, the benefit is based on the amount of avoided natural gas. The avoided cost of natural gas is calculated based on monthly load shapes. The monthly avoided gas cost includes both avoided fixed costs (cash pipeline demand charges) and variable costs (gas commodity costs, cash pipeline usage charges and adjustments for fuel and losses in pipeline transportation and storage of gas).

In the case of electric programs, the "utility cost" includes revenue from the Fund's 3-mill charge, ISO-NE FCM, Class III Renewable Energy Credit ("REC") sales revenues, and RGGI (refer to Table A-1 in the Chapter 1 Overview). It is assumed that these revenue sources are collected from program participants either directly (e.g., the 3-mill charge) or indirectly through collection mechanisms that eventually trickle down to the customer level. For natural gas programs, the "utility cost" is program funding, which is collected directly from customers.

The Total Resource Test compares the present value of future utility system and other customer savings to the total of the conservation expenditures plus customer costs necessary to implement the programs. The customer cost is above and beyond the program cost and represents out-of-pocket costs that a customer may make when installing a measure. Stated another way, the Total Resource Test evaluates the total cost of a measure (including program and customer out-of-pocket costs) with the "fuel blind" benefit of the measure. While certain programs may have low BCRs when assessed by the Utility System Test, the Total Resource Test provides a more comprehensive measure of the overall economic impact, since such programs may often have some value that is not recognized in the Utility System Test, such as other fuels, maintenance savings, or water savings.

Table B (Chapter 1) shows the BCRs for each program and sectors. Table B-1 shows the composition of the benefits for each program and sector. In order to avoid double-counting of benefits, natural gas benefits and costs are not counted in the Total Resource Test for the Electric Companies' programs. Therefore, the Total Resource costs and benefits in the electric and natural gas Table B's are additive.

[26] Additional information can be found in Docket No. 06-10-02, Order 5. This document provides an informative and detailed description and example of the benefit-cost calculations that are used in the measures screening process. http://www.dpuc.state.ct.us/DOCKHIST.NSF/60903cc7b9de44728525746b006e8ffb/0a1d4ae80b371f408525755a004c3dfa?OpenDocument&scrollTop=1462.

The following table illustrates the components of the benefit cost tests that are used for program and measure screening:

Table 2: Cost Benefit Screening Components

Benefit-Cost Test	Cost							Benefit		
	3-Mill	ISO	Class III	RGGI	Gas Collections	Customer Cost (Electric)	Customer Cost (Gas)	Electric	Gas	Other*
Electric System Test	v	v	v	V**				v		
Gas System Test					v				v	
Total Resource Test (Electric)	v	v	v	v		v		v		v
Total Resource Test (Gas)					v		v		v	v

- *Water, other fossil fuels and maintenance are also included in Total Resource tests
- **Portion of RGGI used for Fuel Oil measures not included in EST

A. Electric System Screening

The electric benefits for energy efficiency programs are calculated as follows:

The following avoided costs are used by the EDCs when calculating Electric BCRs for the 2012 C&LM Plan programs. The avoided costs used to screen programs are in nominal dollars in accordance with the department's March 17, 2010 Final Decision (Docket No. 09-10-03 and 08-10-02). The 2011 AESC provided Connecticut values in nominal dollars.

- Avoided Electric Energy Values: The Electric energy prices used by the EDCs are from the AESC. The avoided costs were estimated by factoring in the electric market zone, anticipated fossil fuel costs, existing generation, expected retirements and upgrades, and environmental regulations. Consistent with ISO-NE, energy prices are divided into the following four time periods:
    - Winter Peak: October – May; 6 a.m. – 10 p.m., weekdays excluding holidays.
    - Winter Off-Peak: October – May, 10 p.m. – 6 a.m., weekdays and also all weekends and ISO-NE defined holidays.
    - Summer Peak: June – September; 6 a.m. – 10 p.m., weekdays excluding holidays.

- Summer Off-Peak: June – September; 10 p.m. – 6 a.m., weekdays. Also all weekends and ISO-NE defined holidays.

The following table shows statewide electric energy avoided costs used in the 2012 C&LM Plan.

Table 3 – 2012 AESC Connecticut Avoided Electric Energy Costs
Values are in nominal dollars[27].

Year	Winter Peak Energy ($ per kWh)	Winter Off-Peak Energy ($ per kWh)	Summer Peak Energy ($ per kWh)	Summer Off-Peak Energy ($ per kWh)
2012	0.060	0.051	0.072	0.051
2013	0.063	0.054	0.076	0.053
2014	0.066	0.057	0.079	0.056
2015	0.074	0.064	0.087	0.063
2016	0.076	0.065	0.096	0.065
2017	0.078	0.068	0.098	0.066
2018	0.087	0.077	0.111	0.074
2019	0.088	0.079	0.110	0.076
2020	0.093	0.081	0.108	0.080
2021	0.096	0.085	0.111	0.083
2022	0.102	0.090	0.117	0.088
2023	0.110	0.097	0.126	0.095
2024	0.117	0.101	0.131	0.099
2025	0.120	0.104	0.134	0.104
2026	0.124	0.107	0.142	0.106
2027	0.130	0.112	0.148	0.111
2028	0.137	0.118	0.155	0.117
2029	0.144	0.123	0.163	0.122
2030	0.151	0.129	0.171	0.129
2031	0.159	0.135	0.179	0.135

[27] AESC Appendix B, page B-29

- Avoided Electric Generation Capacity Prices: Avoided Generation Capacity prices are associated with demand savings, which is coincident with system peak. For the purpose of calculating BCRs, coincident system peak savings is based on the average capacity savings that takes place during the ISO-NE definition of Seasonal Summer Peak Savings, or average peak savings that takes place when the system exceeds at least 90 percent of the latest 50-50 forecasts (weather-driven extremes).

  The avoided capacity costs are provided in two broad categories of approaches: capacity that is bid into the FCAs as a resource; and capacity that is not bid into the FCA but has value because it is reducing the ISO-NE forecast of peak demand for which capacity has to be acquired. The EDCs use a weighted average estimate of 100 percent of capacity being bid into the FCM of the planned savings. The two capacity values along with the weighted average based on the 100 percent FCA bid average are shown in Table 2.

Table 4 – 2012 AESC Connecticut Avoided Capacity Costs (Nominal Dollars)[28]

Year	kW Bid into FCM ($ per kW-Year)	kW Not Bid into FCM ($ per kW-Year)	Weighted Average based on 100% ($ per kW-Year)
2012	$38.24		$38.24
2013	$38.24		$38.24
2014	$39.01		$39.01
2015	$39.79		$39.79
2016	$16.67	$19.89	$16.67
2017	$25.01	$29.88	$25.01
2018	$35.62	$42.61	$35.62
2019	$40.77	$48.81	$40.77
2020	$58.19	$69.73	$58.19
2021	$60.48	$72.55	$60.48
2022	$92.59	$111.18	$92.59
2023	$113.79	$136.80	$113.79
2024	$126.98	$152.82	$126.98
2025	$134.40	$161.93	$134.40
2026	$140.09	$168.95	$140.09
2027	$144.11	$174.00	$144.11
2028	$147.72	$178.55	$147.72
2029	$150.86	$182.54	$150.86
2030	$154.06	$186.63	$154.06
2031	$157.34	$190.81	$157.34

[28] AESC Appendix B, page B-29

The DRIPE values are based on small incremental decreases in market prices as a result of lower energy and capacity demand due to conservation and load management efforts. While conservation efforts may only have a very small impact on price, the absolute dollar amount is significant when that lower price is applied to all energy and capacity being purchased in the market. DRIPE impacts are projected to dissipate over time as the market adjusts to the new lower energy and capacity requirements.

Table 5 – 2012 AESC Connecticut DRIPE Capacity and Energy Avoided Costs[29]
Values are in nominal dollars

Year	Capacity DRIPE ($ per kW)	WP Energy DRIPE ($ per kWh)	WOP Energy DRIPE ($ per kWh)	SP Energy DRIPE ($ per kWh)	SOP Energy DRIPE ($ per kWh)
2012	$0.00	$0.018	$0.018	$0.035	$0.024
2013	$0.00	$0.019	$0.018	$0.036	$0.024
2014	$0.00	$0.020	$0.019	$0.038	$0.025
2015	$0.00	$0.023	$0.022	$0.043	$0.029
2016	$48.41	$0.022	$0.021	$0.045	$0.028
2017	$49.98	$0.022	$0.022	$0.045	$0.028
2018	$51.41	$0.025	$0.025	$0.051	$0.033
2019	$50.52	$0.026	$0.026	$0.051	$0.034
2020	$17.16	$0.013	$0.013	$0.024	$0.017
2021	$17.67	$0.012	$0.012	$0.023	$0.016
2022	$181.39	$0.011	$0.012	$0.021	$0.015
2023	$91.23	$0.011	$0.011	$0.019	$0.014
2024	$44.48	$0.010	$0.010	$0.017	$0.013
2025	$23.10	$0.000	$0.000	$0.000	$0.000
2026	$10.17	$0.000	$0.000	$0.000	$0.000
2027	$0.00	$0.000	$0.000	$0.000	$0.000
2028	$0.00	$0.000	$0.000	$0.000	$0.000
2029	$0.00	$0.000	$0.000	$0.000	$0.000
2030	$0.00	$0.000	$0.000	$0.000	$0.000
2031	$0.00	$0.000	$0.000	$0.000	$0.000

- Transmission and Distribution: In response to Order 9 Final Decision Docket 08-10-03, the EDCs each hired a consultant to quantify these values. These studies were completed late in 2010. Based on the department's 2010 Decision a weighted average of these studies was used for the 2011 screening. The Companies used a value of approximately $35.18 per kW to represent avoided distribution and transmission costs. See details on the next page.

[29] AESC Appendix B, page B-29

	Avoided Costs in 2012 Dollars		
Company	**Transmission**	**Distribution**	**Weighting**
CL&P	$1.28	$30.33	80%
UI	$2.59	$46.88	20%
Electric Screening	**$1.54**	**$33.64**	

In addition to the electric benefits, the Total Resource BCRs include the following avoided costs *(these are NOT included in the Electric System BCR):*

- **Fossil Fuel Savings**: Fossil fuel avoided costs are calculated for Fuel Oil, natural gas, and propane. Fuel Oil, natural gas and propane avoided costs are from AESC.

Table 6 – 2012 AESC Connecticut Avoided Fuel Oil and Propane Energy Costs
Values are in nominal dollars[30].

Year	Residential Fuel Oil ($ per MMBtu)	Residential Propane ($ per MMBtu)	C&I Fuel Oil ($ per MMBtu)
2012	$26.74	$40.14	$21.50
2013	$26.47	$39.30	$21.67
2014	$26.20	$38.79	$21.70
2015	$26.18	$38.54	$21.82
2016	$26.65	$38.36	$22.25
2017	$26.96	$38.36	$22.55
2018	$28.30	$39.84	$23.73
2019	$29.40	$40.95	$24.81
2020	$30.44	$42.06	$25.69
2021	$31.23	$43.20	$26.43
2022	$32.12	$44.33	$27.31
2023	$33.18	$45.59	$28.15
2024	$34.10	$46.86	$28.92
2025	$35.19	$48.17	$29.87
2026	$36.28	$49.34	$30.73
2027	$37.49	$50.74	$31.80
2028	$38.75	$52.18	$32.92
2029	$40.05	$53.66	$34.07
2030	$41.39	$55.18	$35.26
2031	$42.78	$56.74	$36.50

[30] AESC Appendix E, page E-2 adjusted for inflation.

- **Water Savings**: Water is valued at approximately $0.01 per gallon and was estimated using Tighe and Bond water and sewer data and average Hartford prices of water and sewage rates.
- **Other Non-Resource Benefits**: These are savings that result from reduced maintenance, savings from the increase in productivity, etc. They are primarily used when screening CFLs to quantify the additional bulb cost savings that result due to CFLs having long lives, such as the value of avoiding future incandescent bulb purchases.
- **Value of Reduced Emissions**: The emissions avoided costs represent the environmental benefits associated with the reduced emissions of NOx, SOx, CO_2, and mercury. These represent projected environmental costs such as costs that are not yet internalized. These avoided costs are above and beyond the direct costs (included in the avoided energy costs) associated with complying with emissions regulators. The values shown below are average values per kWh saved and were derived from AESC.

Table 7 – 2012 Connections Emissions Avoided Costs
Values are in nominal dollars[31]

Year	Average Emissions Value ($ per kWh)
2012	$0.044
2013	$0.045
2014	$0.046
2015	$0.046
2016	$0.047
2017	$0.048
2018	$0.041
2019	$0.040
2020	$0.039
2021	$0.037
2022	$0.036
2023	$0.035
2024	$0.033
2025	$0.032
2026	$0.030
2027	$0.031
2028	$0.031
2029	$0.032
2030	$0.033
2031	$0.033

[31] AESC Appendix B, page B-29

B. Natural Gas Program Screening

The following avoided costs are used by the Natural Gas Companies when calculating Natural Gas BCRs for the 2012 Programs. Avoided costs used to screen programs are in nominal dollars in accordance with the Department's March 17, 2010 Final Decision (Docket No. 09-10-03 and 08-10-02).

The values of avoided cost are based on AECS which calculated average values for the Southern New England Region which included Connecticut and Rhode Island. The 2012 C&LM Plan's avoided costs and savings were separated into residential heating, residential water heating, C&I heating, and other C&I values. The avoided costs in AESC include the avoided cost of natural gas and the avoided costs associated with peak-day reduction.

The following table shows statewide gas energy avoided costs that are used in the 2012 BCR calculations.

Table 8 – 2012 AESC Connecticut Avoided Natural Gas Energy Costs (Values are in nominal dollars[32])

Year	Residential Natural Gas Heating ($ per MMBtu)	Residential Natural Gas Hot Water ($ per MMBtu)	C&I Natural Gas Heating ($ per MMBtu)	C&I Natural Gas ($ per MMBtu)
2012	$6.76	$6.01	$6.76	$6.01
2013	$7.12	$6.34	$7.12	$6.34
2014	$7.67	$6.77	$7.67	$6.77
2015	$8.34	$7.53	$8.34	$7.53
2016	$8.53	$7.72	$8.53	$7.72
2017	$8.68	$7.85	$8.68	$7.85
2018	$8.89	$8.03	$8.89	$8.03
2019	$9.13	$8.24	$9.13	$8.24
2020	$9.43	$8.52	$9.43	$8.52
2021	$9.75	$8.81	$9.75	$8.81
2022	$10.16	$9.15	$10.16	$9.15
2023	$10.71	$9.69	$10.71	$9.69
2024	$11.15	$10.14	$11.15	$10.14
2025	$11.49	$10.44	$11.49	$10.44
2026	$11.90	$10.82	$11.90	$10.82
2027	$12.30	$11.18	$12.30	$11.18
2028	$12.72	$11.57	$12.72	$11.57
2029	$13.14	$11.96	$13.14	$11.96
2030	$13.59	$12.37	$13.59	$12.37
2031	$14.04	$12.79	$14.04	$12.79

[32] AESC Appendix D, page D-6 adjusted for inflation.

In addition to avoided natural gas costs associated with natural gas savings, certain measures also have water savings associated with them. These measures are limited to the residential sector and include low flow showerheads and aerators. The avoided water savings is calculated and used for the Total Resource Cost test only. The value of water savings is approximately 1.0 cents per gallon and was estimated using Tighe and Bond water and sewer costs for Hartford.

Financial Indicators:

The following financial indicators were used within the net-present value calculation of benefits for both the Utility Cost and Total Resource Cost screening:

Nominal Discount Rate ("NDR"): The discount rate is the interest rate used to discount the value of future savings in a standard, present worth economic analysis. A higher rate discounts the present value of future savings more deeply than a lower rate. Thus higher rates result in lower BCRs and lower rates result in higher BCRs. Based on the March 17, 2010 DPUC's Final decision in Docket No. 08-10-03 and 08-10-02, the Companies' after-tax cost of capital weighted average ("COC") was used to calculate the NDR (For electric the weight average of CL&P and UI were used; for gas the weighted average of CNG, SCG and YGS were used). These values were compared to 7 percent and the higher value was used (electric 7.43 percent, gas 7.01 percent). See below for details.

Electric Company	**COC**	**Weighting**
CL&P	7.68%	80%
UI	6.41%	20%
EDC Screening	**7.43%**	
Gas Company	**COC**	**Weighting**
CNG	6.74%	33%
SCG	6.78%	32%
YGS	7.48%	35%
LDC Screening	**7.01%**	

Inflation Rate: The inflation rate of 2 percent based on the 2011 AESC is used to calculate the avoided cost in nominal dollars.

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CHAPTER SEVEN: IT INITIATIVE (CL&P)

The C&LM IT Tracking and Reporting system is an automated tracking and reporting system in accordance with PURA's directive to develop a comprehensive presentation of tracking data for each C&LM program as part of the annual filings. This system is required to meet increasing financial and reporting requirements by the Department such as the included in the Standard Filing Requirements (SFRs). The system was also designed to improve the operating efficiency of the CL&P C&LM staff. The enhancements planned for 2012 intend to continue to fulfill the Department's requirement that all tracking entries of C&LM projects should be traceable and cross-referenced to the Program Savings Document (PSD) Manual, a detailed comprehensive documentation of all claimed resource costs and savings corresponding to individual C&LM technologies. Future enhancements are expected to result in improved accountability and independence in the process of tracking, monitoring and verification of C&LM information.

2011 Major Initiatives completed

- HES Invoicing – updates to the HES system so that vendors can individually invoice CL&P via established purchase orders for approved jobs that are completed.
- HES data review and reconciliation for the Core HES Energy Assessment Jobs, HES Jobs from ARRA/Stimulus funding, HES Jobs from RGGI funding and Insulation rebates via XML files received from Energy Federation, Inc. (EFI)
- Development and deployment of online (web-based) applications for Residential Services (HES and HES-IE) for both CL&P and Yankee Gas.
- Update of System Reports to accommodate Telerik reporting integration
- 2010 Savings calculations enhancements & reconciliation to the Program Savings Document (PSD)
- 2011 Savings calc and new program enhancements
- Residential Financing tracking module which in addition to tracking Residential Loans associated with the HES Program also links HES Recommendations, HES Rebates and Residential Financing to individual customers. The Residential Financing information is loaded in the system via weekly Excel data files provided the Residential Financing vendor.
- Data Warehouse - Report Mart, substantially completed.
- HES New construction module
- Production Implementation of 17 releases of small enhancement and user support issues (annually, hundreds of items are addressed)

2012 Planned Major Initiatives:

Plans call for continuation of the revision of the underlying CLMTRS technology to bring it into line with current industry best-practice standards. Enhancements to existing modules and systems will also continue to be made as tasks are reviewed for process improvements.

- Reviews and upgrades of C&LM Large C&I tracking and reporting system capabilities, such as the system's lead log and custom tracking gas projects. This is the last major module that needs to be incorporated into web based CLMTRS system.
- Data Warehouse/Report Mart Phase II enhancements – 2012 updates are expected to include the design of additional reports and extractions to accommodate ISO-NE Forward Capacity Tracking and Class III RECs tracking and reporting as measures drop off over time.
- Build HES-IE forecasting module to accommodate Letters of Agreement (LOA);
- CLMTRS updates as a result of Merger activities (Best practices, system comparisons, etc.) – Additional items may need to be incorporated as a result of findings from the Merger's Functional Integration Teams (FIT) that review the C&LM program data and tracking from the various MA and CT programs.
- New Retail Products development -
- Ongoing product support (through three-week release cycles) of product fixes and small-system enhancements, and
- HES sales/upgrade tracking
- User support (as needed).

CHAPTER EIGHT: INCREASED SAVINGS SCENARIO

Overview

A stated goal of the Malloy administration is to make Connecticut the leading state in energy efficiency. To achieve this ambitious outcome, the current program offerings will need to be expanded significantly. In addition, private capital will need to be leveraged to deliver savings of the scale required to put Connecticut in the lead. This chapter builds upon the base plan detailed in previous chapters with a framework of modifications needed to begin the process of accelerating savings to achieve the stated policy objectives.

In addition to significantly expanded electric savings programs, this section also identifies increases in gas savings programs that are approximately double the savings outlined in the base plan. Energy efficiency is not limited to electricity – if Connecticut is to become an energy leader, then gas and fuel oil savings must play an important role as well.

The strategy in Chapter 8 also makes a number of assumptions around the removal of obstacles or barriers to deeper and broader savings. One such barrier is how to provide programmatic tools for oil savings measures for businesses as well as residences. Connecticut will need to develop a methodology to capture savings for fuel oil burning equipment. This chapter assumes that statutory or other barriers around fuel oil savings have been removed. The funding needs identified in Chapter 8 also include funding for fuel oil measures.

This increased savings scenario calls for slightly more than two percent of electrical energy savings in 2012. This is nearly twice the savings that would be achieved with the funding available in the base plan outlined in the previous chapters. While this is a substantial increase, it is merely a waypoint on the journey to becoming the leading state in energy efficiency.

The following tables identify the increases in savings and spending. The strategies to achieve these results would include things such as performance contracting, leveraging of private capital, and significant State and Municipal building efforts. This plan also lays out strategies to go deeper and broader in energy efficiency efforts. This approach will be key to accomplishing the levels of savings required in Connecticut.

The strategies outlined in this chapter will require additional funding. Although the amount of the funding required has been identified, the source of that funding has not been identified. There are a number of strategies to provide the funding, each with their own advantages and drawbacks. We assume that these considerations will be part of the review process, allowing for robust stakeholder input into the best approaches to achieve our goals.

There are many goals embodied in Public Act 11-80 (“Act”) that would be accomplished by the plan. There are even more objectives from the Act that will require some additional interpretation before the

details of the goal achievement can be identified. One of those objectives is the goal of weatherizing 80 percent of the homes in Connecticut. The term weatherize is not defined in statute, and there are many interpretations that various stakeholders may make. These goals, and others like them, will be worked out through the stakeholder process conducted by the Energy Efficiency Board.

Table 1. Savings as a Percent of Annual kWh Sales

	2012 Base Budget Savings as % of Annual kWh Sales	2012 Increased Savings as a % of annual kWh Sales	Increase-%	% Increase
Electric	0.80%	2.13%	1.33%	166.3%
Gas	0.35%	0.70%	0.35%	100%

Table 2. 2012 Budget – Base Budget and Increased Savings Budget

	2012 Base Budget	2012 Increased Savings Budget	$ Increase	% Increase
Electric*	$105,561,749	$218,896,200	$113,334,451	107.4%
Gas	$19,127,475	$34,203,989	$15,076,514	78.8%
Total	$124,689,224	$253,100,189	$128,410,965	103.0%

**Increased Savings Budget includes $17 million of oil funding.*

Short-Term Initiatives and Long-Term Planning

This increased savings plan is consistent with both the short-term initiatives and long-term planning needs.

- Reduce electricity consumption by approximately 2 percent, per annum, potentially higher in future years, post 2012
- Reduce natural gas energy consumption by approximately 1 percent, per annum, potentially higher in future years, post 2012
- Reduce energy consumption in State buildings by 10 percent by the end of 2012
- Leverage the Energy Efficiency Fund through Innovative financing and performance contracting
- Weatherize 80 percent of Connecticut homes by 2030
- Implement all cost-effective measures of energy efficiency on a fuel-blind basis

Budget Needs and Short-Term Approaches

In order meet the budget and savings goals, some of the following items are critical:

- Oil Funding – Table 2 identifies the oil funding needed to support electric savings in homes - $17 million. Funding is needed from the oil industry to support oil energy efficiency projects and a proposal is being developed in collaboration with the EEB and its consultants.
- Additional funding is needed on the electric side beyond the standard mill rate, RGGI, FCM, and Class III RECs.
- Reference codes and standards in support of residential initiatives (boilers, set-top-boxes, etc.)

The increased budget funding needs can be accomplished by a combination of the following methods:

  - CAM (Conservation Adjustment Mechanism) – short-term or long-term approach for both electric and natural gas
  - Capitalization / Rates (Decoupling or rate basing energy efficiency.); and
  - Securitization of the mill rate to be utilized for energy efficiency funding

Additionally, in order to accommodate budget flexibility, the Companies and EEB have advocated the use of a rolling budget which can utilize funds from a future year to fund current year program activity (i.e., utilize 2013 future funding in 2012). This practice has been utilized in previous Plans and the Companies have accounting mechanisms in place to borrow from subsequent Plans. The Companies are allowed to earn interest at their respective weighted average cost of capital on the Companies' funds that are expended in advance of the revenues collected. Similarly, the Companies pay carrying charges on funds they collect in advance of being spent on energy efficiency.

2012 Increased Savings Program Assumptions and Caveats (Program Risks)

The following section contains the strategies, outcomes and caveats by sector and program in achieving the spending and savings goals outlined in the subsequent financial tables.

Expanded Plan Strategies, Outcomes and Caveats

Commercial & Industrial Sector:

In the commercial & industrial sector, there are a number of initiatives and focus areas that apply to the entire sector. These are outlined in the following table.

Initiative	Strategy	Outcome	Caveats
Overall Approach for Commercial &Industrial Sector: Strategic framework for all C&I programs; i.e., Sustainable Energy Management (SEM) and High Performance Building Upgrades Increased comprehensiveness – broader and deeper savings and bill reduction Facilitate Performance contracts and 3rd Party Financing Cultivate high performance State Building projects - Develop projects and facility management practices that will result in approximately 69 MWh of energy savings Focus on actual building performance beyond just single measures or simple compliance Broaden reach of programs to reach under-served market segments, especially small businesses Emphasis on market transformation; i.e., raising performance level of the natural market	- Deliver all programs through a Sustainable Energy Management framework - Transition programs from discrete measures to high performance building/facility upgrades - Promote & support performance contracting & 3rd party financing, including utility capital - Consider modifying the incentive cap structure – tiered levels for greater tiers of savings, or based on customer contribution into the fund. - Maintain base incentive structures at current levels - Increase the comprehensive component of the structures - Focus on the State and Municipal Buildings market - Focus on Multi-family (MF) market - Facilitate a greater number of 3rd party financing or performance agreements - Greater Outreach & Education - Consider a broker or aggregator of energy projects	- Customers assume greater responsibility for their energy management and facility upgrades - Provide sustainable energy solutions that significantly reduce energy bills - Modified caps may encourage greater interest in deeper savings - Maintaining incentive structures at current levels helps maintain lower cost rate a focal point from EEB & DEEP - Increased Comprehensive helps drive projects to a broader and deeper level of savings - State market is virtually untapped representing large energy savings opportunities - MF market can produce substantial savings (both electric and gas) - Facilitating the financing helps leverage the fund $$ and is line with the EEB & DEEP direction - Greater outreach & education for informing the vendor and customer communities on the values energy savings as well as the best practices of alternative financing / Performance Contracting; system and equipment optimization; proper maintenance	- Requires business/institutional commitment - Meaningful market change requires longer term perspective - Need to develop mutually agreeable State agreements - Ramp up time for additional, qualified technical labor and market resources to evaluate and install a significant increased volume of projects – both from a vendor perspective and program administrative perspective - Turnaround time on project development – 15 days

Commercial & Industrial Program-Specific Strategies

The following table outlines the actions needed in the commercial & industrial programs to support an increased savings scenario.

Program	Strategy	Outcomes	Caveats
Energy Conscious Blueprint (ECB)	- Use ECB to assist design/construction industry to prepare for IECC 2012 upgrade - Focus on deep efficiency building renovations and upgrades through Advanced Design Guidelines, energy modeling, deeper market penetration of Whole Building Performance initiative. - Focus on high rise multi-family opportunities - Maintain base incentive structures at current levels - Focus on major renovation and equipment change out since new construction market is depressed. - Test third-party project brokering for high performance projects and project financing - R&D building energy performance labeling and certification	- Enhanced capability of the design/construction industry to develop high performance buildings - Market transformation for the building upgrade market - Maintaining base incentive structures at current levels helps maintain the cost rates - Increase in projects – approx. 60 new projects electric and 216 natural gas	- Market transformation requires multi-year effort - Long-term payoff requires equivalent regulatory perspective - Need State agreement to maximize the State opportunities - Need to demonstrate the business case for high performance building upgrades - Turnaround time on project development – 15 days
Energy Opportunities / Municipal (EO/MEO)	- Continue transition from discrete measures to comprehensive, high performance projects - Leverage CEEF through financing & performance contracting - Support Green State Buildings Plan and support high performance upgrades/retrofits for State buildings - Maintain base incentive structures at current levels - Increase the comprehensive component of the projects - Remove or modify the incentive caps - Focus on State buildings - Focus on high rise multi-family facilities - Reduce the MEO financing cap from the	- Comprehensive approach yields meaningful energy bill reductions - Maintaining base incentive structures at current levels helps maintain the cost rates - Same or higher comprehensive incentives will help drive projects - Modifying caps could allow greater magnitude of savings - Reducing the MEO cap will help force towns to consider alternative financing or performance contracts - Increase in projects – approx. 1,253 new projects electric and 189 natural gas	- Need to shift customers' priority from rebates to investment benefits (i.e., bill reduction and other benefits) - Need State agreement in order to maximize the State opportunities - Loss of 0 percent financing on municipal buildings projects may stall implementation - Ramp up time for resources to evaluate and install a significant increased volume of projects – both from a vendor perspective and program administrative perspective

Program	Strategy	Outcomes	Caveats
	\$400 thousand per municipality to possibility \$200 or even \$150 thousand - Consider offering memberships to Energy Service Companies (ESCOs) for performance contracting guidance - Consider subsidizing a performance contracting consultant - Consider subsidizing a broker for financing projects - Increased outreach and education		
Retro Commissioning (RCx)	- Promote market-driven RCx services - Maintain base incentive structures at current levels - Maximize the State opportunity – especially SCSU - Target buildings that were ECB New Construction projects in 2000-2004 - More RCx providers – issue RFP - Increased outreach & education	- More RCx providers enhances the ability to increase work - Increase in projects – approx 320 new projects electric and 8 natural gas	- Need the State agreement in order to maximize the State opportunities - Turnaround time on project development – 15 days
O&M / Sustainable Energy Management	- Promote sustainable energy management and services for all customers - Provide access to energy management tools and services - Maximize the State opportunities - Maximize the multi-family opportunities - Maximize systems and process opportunities - Greater Outreach & Education	- Capture major and very cost-effective energy savings in a virtually untapped market - Creates market opportunity for service providers - Greater outreach & education for informing the vendors and customers on the values and best practices O&M - Increase in projects – approx. 80 new projects electric and several natural gas	- Requires business / institutional commitment - Need to upgrade service provider capabilities which requires sustained, long-term efforts - Need State agreement in order to maximize the State opportunities - Turn around time on project development – 15 business days
Small Business Energy Advantage (SBEA)	- Aggressively address under served markets - Maintain base incentive structures at current levels - Increase the comprehensive component of the projects - CL&P – increase number of SBEA vendors participating in the - CL&P – ramp up program administration efforts to evaluate and approve	- More equitable service provision in economically depressed areas - Maintaining base incentive structures at current levels helps maintain the cost rates - Same or higher comprehensive incentives will help drive projects - Reducing the size reverts back to the UI's original form of SBEA and may push the larger customer	- Need State agreement in order to maximize the State opportunities - Need to establish an agreed upon process for acting on the agreement when approved – 15 business days - Ramp up time for resources to evaluate and install a significant increased volume of projects – both from a

Program	Strategy	Outcomes	Caveats
	projects - UI - Consider reducing the size of SBEA from 200 kW to 150 kW or less (UI only) - Maximize the State opportunity - Maximize the opportunities in economically depressed urban areas – a low income version of SBEA	to consider 3rd party loans - Reducing the size also may fit into the skill sets of traditional SBEA vendors - Addressing the size eligibility - State facilities could yield approx 3.5 MWh (UI) - Addressing the economically depressed businesses yields low savings; increases costs and carries a strong PR message - Increase in projects – approx. 4,261 new projects electric and 39 natural gas	vendor perspective and program administrative perspective

Residential Sector

The following assumptions and strategies apply to the residential sector:

- Increased funding for oil measures: $17 million
- Significant increase in the number of gas and oil heated homes served in HES and HES -IE programs
- Continue to focus on the promotion of standard CFLs and increase focus on Solid State Lighting (LEDs)
- Deeper and more comprehensiveness needed in HES

Residential: Program Specific Strategies:

Program	Strategy	Outcome	Caveats
Home Energy Solutions (HES)	- Continue to offer HES services to oil and propane heated homes. Targeting of high use older homes with inferior construction and central air. - Triple number of residences served - Focus on the adoption of add-on measures - Increase and offer fuel-blind financing (UI) of energy efficiency upgrades suggested through HES - Targeting of multi-family opportunities - Increase number of bulbs per home currently capped at 25 - Greater "pressure" on	- Greater savings per home by serving customers based on need. - Meets the State goal of weatherizing 80 percent CT homes by 2030 - Increase residence savings for all heating fuels - Increase energy savings for all fuel types. - Increased participation and deeper savings in Multi-family projects	- Imperative that a funding mechanism for oil measures be established - Timeline for program approval and the ability for vendors to ramp up production. The need for additional vendors might exist. - HES vendor base will need to focus on comprehensive services - Ramp up time for additional, qualified technical labor and market resources to evaluate and install a significant increased volume of projects – both from a vendor perspective and

Program	Strategy	Outcome	Caveats
	vendors, including weeding out those that under perform - More use of financing for higher value project - More comprehensive Tier II/Home Performance with HES jobs		program administrative perspective
Retail Products	- Continue promotion of standard CFLs, increase in CFLs and specialty CFLs in the 2% plan - Promote LED lighting - Educate consumers to choose lighting based on lumens, not watts - Development of an new appliance and consumer electronics rebate initiative - Leverage EISA and new FTC lamp labels as a marketing/educational opportunity	- Increase socket saturation of CFLs within CT homes - Introduce customers to alternative energy efficient lighting	- Look to DEEP to eliminate socket saturation goals - LED price point are still high but decreasing. - Supply of products available at retail outlets, especially LED products where supply may be limited. - Higher CFL costs driven by large increase in phosphor prices
Home Energy Solutions – Income Eligible	- Significant increase in the number of customers to be served and deepness of measures being installed	- Meets the State's goal of weatherizing 80% of CT homes by 2030	- Impact of unspent DOE WAP ARRA funds - Vendor capacity
Residential New Construction (RNC)	- Increase participation of oil homes - Move new homes to increasingly higher savings tiers - Use innovative marketing techniques like proposed "New Home, No Bill" promotion	- Use oil funding to increase oil/propane rebates to a level which is on par with current electric and natural gas rebates	- Imperative that a funding mechanism for oil measures be established.
Other Programs and Initiatives	- Investigate possible new programs and initiatives for the purpose of increasing cost effective savings in existing programs and/or launching new programs.	- Development of new programs, initiatives or re-structuring of current offerings. New offerings may include Appliance Retirement, High Efficiency Products (e.g. Top Ten), High Efficiency Furnace Fan, Advanced Power Strips, expanded Ductless Heat Pump (DHP) and Heat Pump Water Heater (HPWH) offerings, etc.	- The market potential and consumer acceptance of new offerings is unknown. Cost effectiveness could be a barrier in some cases.

Performance Incentives

In addition to the largest driver being the reduction in energy consumption and peak demand, the following performance measures are addressed in the 2012 increased savings scenario:

- Residential
    - 20 percent increase in the Average Savings per HES Participant
    - 10 percent of the HES participants will achieve 25 percent energy savings based on the average consumption per HES participant
    - Meet HES-IE spending targets. (Failure to meet 88 percent of the spending target will result in a Negative Performance Incentive)
    - Alignment of HES and HES-IE BPI Certfications. One person in each crew with both BPI Building Analyst 1 and Envelop Specialist certifications by 6/30/12. By 9/30/12 each crew will have received training and be able to provide duct sealing services as per HES guidelines. Each crew will have the necessary testing and diagnostic equipment to perform duct sealing.
- Commercial and Industrial
    - Energy Opportunities and Small Business Energy Advantage
        - EO – 10 percent of signed projects will incorporate performance contracting and/or 3rd Party Financing, including utility capital.
        - EO and SBEA – 15 percent of projects participating in the Comprehensive Initiative.
        - EO and SBEA - The Companies will develop a plan which includes a protocol for defining market penetration and segmentation and establishing long term goals in collaboration with the EEB
    - Energy Conscious Blueprint
        - Percentage of new construction/major renovation projects that exceed the new construction State Energy Code baseline by at least 30 percent of follow the whole building performance track
        - The companies will develop a plan to transition into IECC 2012 (ASHRAE 2010) in collaboration with the EEB:
            - Awareness: Prepare the market by working with the A/E community, the trade communities; and inspectors
            - Develop and deliver a series of code training sessions for the A/E and trade communities
    - Operations &Maintenance

- The Companies will develop and promote a Sustainable Energy Management Plan and Guide which includes benchmarking, the use of energy monitoring dashboards, and an implementation plan in collaboration with EEB

Marketing

Increased marketing efforts and expenditures will be a necessary component of an increased savings scenario. Marketing follows two tracks. The first track is primarily programmatic. The marketing strategies outlined in the base plan for each program will still be pursued, but at an increased level consistent with the increased budget and participation goals. The other track has traditionally been characterized as general awareness.

The Companies have described several marketing strategies and have provided a plan outline to support their recommended strategy for a statewide integrated communications plan. (Presented at the August 24 EEB meeting.) The Companies are working with the EEB and the Marketing Committee to finalize a plan which includes reintroducing the brand. The plan will be forwarded DEEP and PURA once completed.

INCREASED SAVING SCENARIO TABLES

Table A1

2012

CL&P/UI Proposed C&LM Budget - Increased Savings

CL&P/UI C&LM BUDGET	2012 CL&P Increased Savings Budget	2012 UI Increased Savings Budget	2012 CL&P/UI Proposed Budget Total
RESIDENTIAL			
Residential Retail Products	$ 10,960,000	$ 3,445,304	$ 14,405,304
Appliance Rebate Program	$ 4,000,000		$ 4,000,000
Total - Consumer Products	**$ 14,960,000**	**$ 3,445,304**	**$ 18,405,304**
Residential New Construction	$ 1,838,050	$ 177,329	$ 2,015,379
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 19,905,000	$ 7,364,631	$ 27,269,631
HES Income Eligible	$ 19,039,000	$ 5,038,002	$ 24,077,002
Subtotal Residential	**$ 55,742,050**	**$ 16,025,266**	**$ 71,767,316**
COMMERCIAL & INDUSTRIAL			
C&I LOST OPPORTUNITY			
Energy Conscious Blueprint	$ 8,669,250	$ 3,882,818	$ 12,552,068
Total - Lost Opportunity	**$ 8,669,250**	**$ 3,882,818**	**$ 12,552,068**
C&I LARGE RETROFIT			
Energy Opportunities	$ 33,614,000	$ 10,529,387	$ 44,143,387
O&M (Services, RetroCx, BSC)	$ 9,581,000	$ 3,776,044	$ 13,357,044
PRIME	$ 536,550	$ 402,385	$ 938,935
Total - C&I Large Retrofit	**$ 43,731,550**	**$ 14,707,816**	**$ 58,439,366**
Small Business	$ 38,305,000	$ 4,512,339	$ 42,817,339
Subtotal C&I	**$ 90,705,800**	**$ 23,102,973**	**$ 113,808,773**
OTHER - EDUCATION *			
SmartLiving Center® - Museum Partnerships	$ 400,350	$ 481,746	$ 882,096
EE Communities / Behavior Pilot	$ 1,500,400	$ 300,000	$ 1,800,400
K-8 Education	$ 325,000	$ 401,825	$ 726,825
Science Center	$ 166,000	$ 42,000	$ 208,000
Subtotal Education	**$ 2,391,750**	**$ 1,225,571**	**$ 3,617,321**
OTHER - PROGRAMS/REQUIREMENTS			
Institute for Sustainable Energy (ECSU)	$ 448,000	$ 112,000	$ 560,000
Residential Loan Program (Includes ECLF)	$ 2,050,700	$ 347,280	$ 2,397,980
C&I Loan Program	$ 500,000	$ 173,000	$ 673,000
C&LM Loan Defaults	$ 300,000	$ 50,000	$ 350,000
Subtotal Programs/Requirements	**$ 3,298,700**	**$ 682,280**	**$ 3,980,980**
OTHER - LOAD MANAGEMENT			
ISO Load Response Program	$ 3,500,000	$ 1,376,000	$ 4,876,000
Subtotal Load Management	**$ 3,500,000**	**$ 1,376,000**	**$ 4,876,000**
OTHER - RENEWABLES & RD&D			
Research, Development & Demonstration	$ 375,900	$ 225,000	$ 600,900
Subtotal Renewables & RD&D	**$ 375,900**	**$ 225,000**	**$ 600,900**
OTHER - ADMINISTRATIVE & PLANNING			
Administration	$ 1,199,700	$ 750,000	$ 1,949,700
Marketing Plan	$ 500,000	$ 250,000	$ 750,000
Planning (UI Planning & Evaluation)	$ 779,550	$ 316,765	$ 1,096,315
Evaluation (UI Evaluation , Outside Services)	$ 2,210,400	$ 570,000	$ 2,780,400
Information Technology	$ 1,950,000	$ 342,500	$ 2,292,500
Energy Efficiency Board	$ 650,000	$ 350,000	$ 1,000,000
Performance Management Fee	$ 8,132,693	$ 2,243,318	$ 10,376,011
Admin/Planning Expenditures	**$ 15,422,343**	**$ 4,822,583**	**$ 20,244,926**
PROGRAM SUBTOTALS			
Residential	$ 60,171,150	$ 17,633,368	$ 77,804,518
C&I	$ 95,519,150	$ 24,916,722	$ 120,435,872
Other*	$ 15,746,243	$ 4,909,583	$ 20,655,826
TOTAL Note 1	**$ 171,436,543**	**$ 47,459,673**	**$ 218,896,216**

* OTHER -EDUCATION is primarily allocated to residential programs.

Note 1: See Table A2 for Revenue Breakdown

Table A2

2012, 2013, 2014

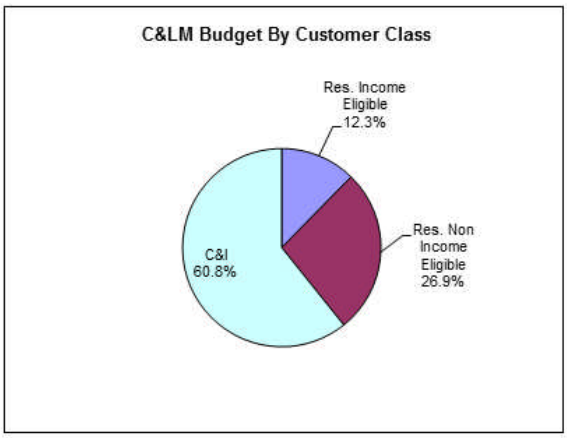
CL&P/UI C&LM Revenues

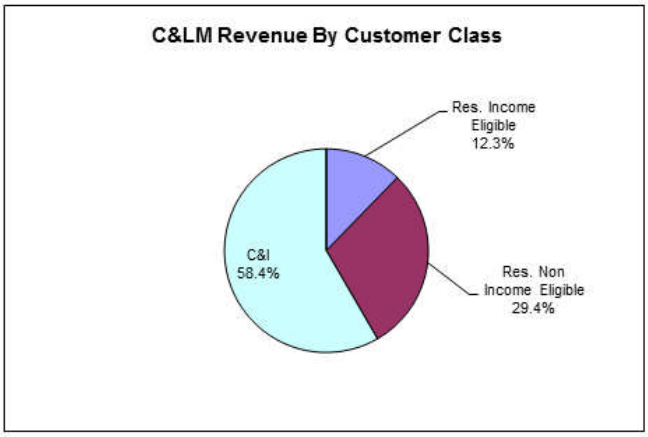
CL&P/UI C&LM REVENUES	2012 Base Budget with RGGI			2012 with RGGI & Increased Savings		
	2012 CL&P Revenues	2012 UI Revenues	2012 CL&P/UI Total	2012 CL&P Revenues	2012 UI Revenues	2012 CL&P/UI Total
Collections (Mil Rate)	$ 67,359,070	$ 16,494,000	$ 83,853,070	$ 67,359,070	$ 16,494,000	$ 83,853,070
ISO-NE Other Demand Resources (ODRs)	$ 6,500,000	$ 1,600,000	$ 8,100,000	$ 6,500,000	$ 1,600,000	$ 8,100,000
ISO-NE Forward Capacity Market Demand Response Revenues	$ 3,500,000	$ 1,376,000	$ 4,876,000	$ 3,500,000	$ 1,376,000	$ 4,876,000
Class III Renewable Energy Credits	$ 3,600,000	$ 900,000	$ 4,500,000	$ 3,600,000	$ 900,000	$ 4,500,000
Carrying Charges	$ 800,000		$ 800,000	$ 800,000	$ -	$ 800,000
RGGI*	$ 2,432,679	$ 1,000,000	$ 3,432,679	$ 2,432,679	$ 1,000,000	$ 3,432,679
Other Fuel Revenues (Oil Funding)			$ -	$ 12,907,000	$ 4,155,287	$ 17,062,287
Other Revenues (i.e., CAM, other)			$ -	$ 74,337,794	$ 21,934,386	$ 96,272,180
Total - C&LM Revenues	**$ 84,191,749**	**$ 21,370,000**	**$ 105,561,749**	**$ 171,436,543**	**$ 47,459,673**	**$ 218,896,216**

CL&P/UI C&LM REVENUES	2013 Proposed Base Budget			2014 Proposed Base Budget		
	2013 CL&P Revenues	2013 UI Revenues	2013 CL&P/UI Total	2014 CL&P Revenues	2014 UI Revenues	2014 CL&P/UI Total
Collections (Mil Rate)	$ 68,429,150	$ 16,515,000	$ 84,944,150	$ 69,467,920	$ 16,641,000	$ 86,108,920
ISO-NE Other Demand Resources (ODRs)	$ 6,200,000	$ 1,600,000	$ 7,800,000	$ 6,000,000	$ 1,600,000	$ 7,600,000
ISO-NE Forward Capacity Market Demand Response Revenues	$ 3,000,000	$ 1,100,000	$ 4,100,000	$ 3,000,000	$ 1,100,000	$ 4,100,000
Class III Renewable Energy Credits	$ 3,200,000	$ 800,000	$ 4,000,000	$ 3,000,000	$ 800,000	$ 3,800,000
RGGI*	$ 2,432,679	$ 1,000,000	$ 3,432,679	$ 2,432,679	$ 1,000,000	$ 3,432,679
Total - C&LM Revenues	**$ 83,261,829**	**$ 21,015,000**	**$ 104,276,829**	**$ 83,900,599**	**$ 21,141,000**	**$ 105,041,599**

*RGGI Budget is based on 50% of the $2.00 / allowance for 2012 through 2014

Statewide (CL&P and UI) 2012 C&LM Budget and Parity Analysis
Table A1 Pie Chart





Customer Class	Budget ($,000)	% of Total C&LM Budget	% of Residential & C&I Budget	% of Residential & C&I Revenue	Difference
Res. Income Eligible	$24,455,249	11.17%	12.34%	12.27%	0.07%
Res. Non Income Eligible	$53,349,269	24.37%	26.91%	29.38%	-2.47%
Residential Subtotal	$77,804,518	35.54%	39.25%	41.65%	-2.40%
C&I	$120,435,872	55.02%	60.75%	58.35%	2.40%
C&I Subtotal	$120,435,872	55.02%	60.75%	58.35%	2.40%
Residential and C&I Subtotal	$198,240,390	90.56%	100.00%	100.00%	0.00%
Other Expenditures					
Other Expenditures	$20,655,826	9.44%			
Other Expenditures Subtotal	$20,655,826	9.44%			
C&LM TOTAL	**$218,896,216**	**100.00%**			
CL&P	$171,436,543	78.32%			
UI	$47,459,673	21.68%			

Totals may vary due to rounding

TABLE B2
STATEWIDE TOTAL RESOURCE COSTS AND BENEFITS FOR C&LM PROGRAMS

Program	Utility Costs 2012	Customer Cost 2012	Total Resource Cost 2012	Total Resource Benefit 2012	Total Resource B/C Ratio	Annualized Savings kWh	Lifetime Savings kWh	Load Savings kW	Annual Water Savings (Gal)	Lifetime Water Savings (Gal)	Annual Gas Savings (CCF)	Lifetime Gas Savings (CCF)	Peak Day Gas Savings (CCF)	Annual Oil Savings (Gal)	Lifetime Oil Savings (gal)	Annual Propane Savings (Gal)	Lifetime Propane Savings (Gal)	CO2 Emissions Reductions (Lifetime Tons)
Residential Retail Products	$ 14,405,304	$ 9,669,948	$ 24,075,252	$ 102,293,216	4.2	159,304,199	740,343,299	11,919	-	-	-	-	-	-	-	-	-	371,800
Appliance Rebate Program	$ 4,000,000	$ 2,000,000	$ 6,000,000	$ 6,504,726	1.1	8,000,000	80,000,000	720	-	-	-	-	-	-	-	-	-	-
TOTAL - CONSUMER PRODUCTS	**$ 18,405,304**	**$ 11,669,948**	**$ 30,075,252**	**$ 108,797,943**	**3.6**	**167,304,199**	**820,343,299**	**12,639**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**371,800**
Water Heating	$ 156,266	$ 327,952	$ 484,218	$ 297,613	0.6	-	-	-	-	-	46,788	561,454	150	-	-	-	-	3,277
Residential New Construction	$ 3,265,379	$ 1,914,932	$ 5,180,311	$ 7,530,338	1.5	2,753,889	46,667,439	624	-	-	103,361	2,584,022	936	3,371	84,263	28,382	709,556	43,942
Home Energy Solutions	$ 36,317,400	$ 6,462,212	$ 42,779,612	$ 96,593,910	2.3	30,001,096	309,048,744	6,248	8,574,268	59,786,810	1,359,419	26,122,060	12,050	954,268	17,649,033	137,590	2,064,539	517,664
HES Income Eligible	$ 30,741,319	$ 1,620,769	$ 32,362,088	$ 62,893,476	1.9	29,349,197	261,996,751	2,096	7,214,416	38,189,859	883,368	16,087,656	6,586	681,733	11,847,166	82,832	1,008,710	364,052
SUB-TOTAL RESIDENTIAL	**$ 88,885,668**	**$ 21,995,814**	**$ 110,881,482**	**$ 276,113,280**	**2.5**	**229,408,382**	**1,438,056,233**	**21,608**	**15,788,684**	**97,976,669**	**2,392,936**	**45,355,193**	**19,723**	**1,639,372**	**29,580,462**	**248,804**	**3,782,804**	**1,300,735**
Energy Conscious Blueprint	$ 20,131,606	$ 4,019,971	$ 24,151,577	$ 67,418,450	2.8	31,839,084	488,764,416	6,406	-	-	1,545,905	23,458,899	11,848	-	-	-	-	382,369
TOTAL - LOST OPPORTUNITY	**$ 20,131,606**	**$ 4,019,971**	**$ 24,151,577**	**$ 67,418,450**	**2.8**	**31,839,084**	**488,764,416**	**6,406**	**-**	**-**	**1,545,905**	**23,458,899**	**11,848**	**-**	**-**	**-**	**-**	**382,369**
Energy Opportunities	$ 49,983,835	$ 83,686,760	$ 133,670,595	$ 210,207,987	1.6	139,062,594	1,712,845,309	19,915	-	-	1,732,861	19,705,118	27,652	-	-	-	-	975,195
O&M Svcs (BSC, Training, RetroCx)	$ 14,056,157	$ 16,174,358	$ 30,230,515	$ 68,712,675	2.3	68,966,017	525,995,327	7,677	-	-	287,227	2,872,300	3,532	-	-	-	-	280,918
PRIME	$ 938,935	$ 50,513	$ 910,063	$ 16,564,772	18.2	3,187,775	15,939,141	-	-	-	-	-	-	-	-	-	-	8,005
TOTAL - C&I LARGE RETROFIT	**$ 64,978,927**	**$ 99,911,631**	**$ 164,811,173**	**$ 295,485,433**	**1.8**	**211,216,386**	**2,254,779,777**	**27,591**	**-**	**-**	**2,020,088**	**22,577,418**	**31,184**	**-**	**-**	**-**	**-**	**1,264,117**
Small Business	$ 43,443,627	$ 54,506,772	$ 97,950,399	$ 164,286,733	1.7	116,784,575	1,434,182,444	20,049	-	-	(409,807)	(5,072,786)	(2,883)	-	-	-	-	690,640
SUB-TOTAL C&I	**$128,554,160**	**$ 158,438,374**	**$ 286,913,149**	**$ 527,190,615**	**1.8**	**359,840,045**	**4,177,726,637**	**54,047**	**-**	**-**	**3,156,185**	**40,963,531**	**40,149**	**-**	**-**	**-**	**-**	**2,337,127**

Table A

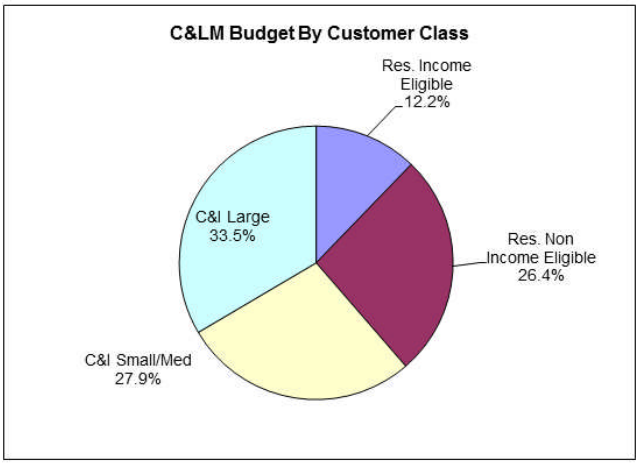
CL&P 2012 Proposed C&LM Budget

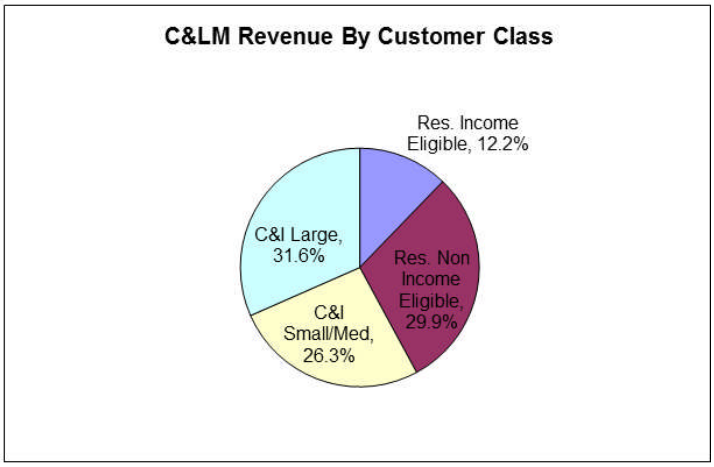
CL&P C&LM BUDGET	2011 CL&P Revised Budget 06/30/11	2012 CL&P Proposed Base Budget 10/01/11	2012 (A) CL&P Proposed Budget Increased Savings 10/01/11	2013 CL&P Proposed Base Budget 10/01/11
RESIDENTIAL				
Residential Retail Products Note 1	$ 6,132,901	$ 4,850,000	$ 10,960,000	$ 4,818,475
Appliance Rebate Program / New Programs	$ -	$ -	$ 4,000,000	$ -
Total - Consumer Products	**$ 6,132,901**	**$ 4,850,000**	**$ 14,960,000**	**$ 4,818,475**
Residential New Construction	$ 1,460,024	$ 1,261,000	$ 1,838,050	$ 1,252,803
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 4	$ 17,749,370	$ 11,757,000	$ 19,905,000	$ 11,729,390
HES Income Eligible	$ 11,027,047	$ 9,399,700	$ 19,039,000	$ 9,338,600
Subtotal Residential	**$ 36,369,342**	**$ 27,267,700**	**$ 55,742,050**	**$ 27,139,268**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 8,759,606	$ 8,503,000	$ 8,669,250	$ 8,447,516
Total - Lost Opportunity	**$ 8,759,606**	**$ 8,503,000**	**$ 8,669,250**	**$ 8,447,516**
C&I LARGE RETROFIT				
Energy Opportunities	$ 25,935,919	$ 13,241,680	$ 33,614,000	$ 13,155,610
O&M (Services, RetroCx, BSC)	$ 4,729,740	$ 4,171,000	$ 9,581,000	$ 4,143,900
PRIME	$ 488,087	$ 485,000	$ 536,550	$ 485,000
Total - C&I Large Retrofit	**$ 31,153,746**	**$ 17,897,680**	**$ 43,731,550**	**$ 17,784,510**
Small Business	$ 13,436,752	$ 11,640,000	$ 38,305,000	$ 11,577,638
Subtotal C&I	**$ 53,350,104**	**$ 38,040,680**	**$ 90,705,800**	**$ 37,809,664**
OTHER - EDUCATION *				
SmartLiving Center® - Museum Partnerships	$ 400,000	$ 400,000	$ 400,350	$ 400,000
EE Communities / Behavior Pilot	$ 850,000	$ 1,000,000	$ 1,500,400	$ 850,000
K-8 Education	$ 225,000	$ 325,000	$ 325,000	$ 325,000
Science Center		$ 166,000	$ 166,000	$ 166,000
Subtotal Education	**$ 1,475,000**	**$ 1,891,000**	**$ 2,391,750**	**$ 1,741,000**
OTHER - PROGRAMS/REQUIREMENTS				
Institute for Sustainable Energy (ECSU)	$ 448,000	$ 448,000	$ 448,000	$ 448,000
Residential Loan Program (Includes ECLF)	$ 3,650,000	$ 2,051,429	$ 2,050,700	$ 2,175,238
C&I Loan Program	$ 475,000	$ 500,000	$ 500,000	$ 500,000
C&LM Loan Defaults	$ 135,000	$ 150,000	$ 300,000	$ 150,000
Subtotal Programs/Requirements	**$ 4,708,000**	**$ 3,149,429**	**$ 3,298,700**	**$ 3,273,238**
OTHER - LOAD MANAGEMENT				
ISO Load Response Program Note 2	$ 3,000,000	$ 3,500,000	$ 3,500,000	$ 3,000,000
Subtotal Load Management	**$ 3,000,000**	**$ 3,500,000**	**$ 3,500,000**	**$ 3,000,000**
OTHER - RENEWABLES & RD&D				
Research, Development & Demonstration	$ 200,000	$ 350,000	$ 375,900	$ 350,000
Subtotal Renewables & RD&D	**$ 200,000**	**$ 350,000**	**$ 375,900**	**$ 350,000**
OTHER - ADMINISTRATIVE & PLANNING				
Administration	$ 900,000	$ 900,000	$ 1,199,700	$ 900,000
Marketing Plan	$ 176,651	$ 200,000	$ 500,000	$ 200,000
Planning Note 3	$ 650,000	$ 650,000	$ 779,550	$ 650,000
Evaluation Note 3	$ 1,800,000	$ 2,010,000	$ 2,210,400	$ 2,010,000
Information Technology	$ 1,700,000	$ 1,700,000	$ 1,950,000	$ 1,700,000
Energy Efficiency Board	$ 400,000	$ 550,000	$ 650,000	$ 550,000
Performance Management Fee	$ 5,216,455	$ 3,982,940	$ 8,132,693	$ 3,938,659
Subtotal Admin/Planning Expenditures	**$ 10,843,106**	**$ 9,992,940**	**$ 15,422,343**	**$ 9,948,659**
PROGRAM SUBTOTALS				
Residential	$ 41,385,663	$ 31,056,929	$ 60,171,150	$ 30,932,306
C&I	$ 57,245,434	$ 42,543,880	$ 95,519,150	$ 41,782,864
Other*	$ 11,314,455	$ 10,590,940	$ 15,746,243	$ 10,546,659
TOTAL C&LM BUDGET	**$ 109,945,552**	**$ 84,191,749**	**$ 171,436,543**	**$ 83,261,829**
TOTAL	**$ 109,945,552**	**$ 84,191,749**	**$ 171,436,543**	**$ 83,261,829**

* OTHER -EDUCATION is primarily allocated to residential programs.

Note 1: Retail Products includes Retail Lighting and ENERGY STAR Appliances.
Note 2: ISO-NE Load Response Customer payments are funded from the Forward Capacity Market
Note 3: Planning and Evaluation activities split into separate budget line items.
Note 4: Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.

CL&P 2012 C&LM Budget and Parity Analysis
Table A Pie Chart





Customer Class	Budget	% of Total C&LM Budget	% of Residential & C&I Budget	% of Residential & C&I Revenue	Difference
Res. Income Eligible	$19,039,000	11.11%	12.23%	12.23%	0.00%
Res. Non Income Eligible	$41,132,150	23.99%	26.42%	29.88%	-3.46%
Residential Subtotal	$60,171,150	35.10%	38.65%	42.11%	-3.46%
C&I Small/Med	$43,365,694	25.30%	27.85%	26.28%	1.57%
C&I Large	$52,153,456	30.42%	33.50%	31.61%	1.89%
C&I Subtotal	$95,519,150	55.72%	61.35%	57.89%	3.46%
Residential and C&I Subtotal	$155,690,300	90.82%	100.00%	100.0%	0.0%
Other Expenditures					
Other Expenditures	$15,746,243	9.18%			
Other Expenditures Subtotal	$15,746,243	9.18%			
C&LM TOTAL	**$171,436,543**	100.00%			

C&I Non-Gov't	
Budget	Revenue
61.35%	57.89%

Note - Municipalities and state facilities are eligible to participate in C&I Program offerings as applicable.

TABLE B
CL&P 2012 COMPARISON OF CONSERVATION PROGRAMS - ELECTRIC & OIL

COMPARISON OF CL&P CONSERVATION PROGRAMS FOR 2012

Program	Utility Costs (electric & oil) (000)	Customer Costs (000)	Total Resource Costs (000)	Electric System Benefit (000)	Total Resource Benefit (000)	Electric System B/C Ratio	Total Resource B/C Ratio	Statewide Total Resource B/C Ratio	# of Units	Units	Annualized Savings (MWh)	Lifetime Savings (MWh)	kW Impact (Y/E)	Demand Cost $/kW**	Demand Cost $/kW-yr**	Cost Rate $/kwh Annualize**	Utility Cost Ratio $/LT-kWh**
RESIDENTIAL																	
Residential Retail Products Note 1	$ 10,960	$ 8,379	$ 19,339	$ 47,992	$ 82,666	4.4	4.3	4.2	3,916,115	Products	128,669	598,166	9,162	$ 1,196	$ 257	$ 0.085	$ 0.018
Appliance Rebate Program	$ 4,000	$ 2,000	$ 6,000	$ 6,505	$ 9,003	1.6	1.5	1.1	10,000	Products	8,000	80,000	720	$ 5,556	$ 556	$ 0.500	$ 0.050
Total - Consumer Products	**$ 14,960**	**$ 10,379**	**$ 25,339**	**$ 54,497**	**$ 91,669**	**3.6**	**3.6**	**3.6**			**136,669**	**678,166**	**9,882**	**$ 1,514**	**$ 305**	**$ 0.109**	**$ 0.022**
Residential New Construction	$ 1,838	$ 1,096	$ 2,934	$ 3,391	$ 5,863	1.8	2.0	1.5	729	Homes	2,512	43,726	521	$ 3,526	$ 203	$ 0.732	$ 0.042
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 2	$ 19,905	$ 4,508	$ 24,413	$ 18,488	$ 58,124	0.9	2.4	2.3	30,537	Cust/HVAC Rebates	21,719	224,916	4,024	$ 4,728	$ 457	$ 0.876	$ 0.085
HES Income Eligible	$ 19,039	$ 979	$ 20,018	$ 14,907	$ 39,053	0.8	2.0	1.9	25,193	Customers	23,697	196,693	1,621	$ 11,743	$ 1,415	$ 0.803	$ 0.097
Subtotal Residential	**$ 55,742**	**$ 16,962**	**$ 72,704**	**$ 91,284**	**$ 194,710**	**1.6**	**2.7**	**2.5**			**184,597**	**1,143,501**	**16,049**	**$ 3,473**	**$ 561**	**$ 0.302**	**$ 0.049**
COMMERCIAL & INDUSTRIAL																	
C&I LOST OPPORTUNITY																	
Energy Conscious Blueprint	$ 8,669	$ 325	$ 8,994	$ 27,467	$ 35,061	3.2	3.9	2.8	487	Customers	20,110	309,173	4,435	$ 1,955	$ 127	$ 0.431	$ 0.028
Total - Lost Opportunity	**$ 8,669**	**$ 325**	**$ 8,994**	**$ 27,467**	**$ 35,061**	**3.2**	**3.9**	**2.8**	**487**		**20,110**	**309,173**	**4,435**	**$ 1,955**	**$ 127**	**$ 0.431**	**$ 0.028**
C&I LARGE RETRO FIT																	
Energy Opportunities	$ 33,614	$ 53,510	$ 87,124	$ 114,071	$ 149,677	3.4	1.7	1.6	1,650	Customers	105,469	1,290,212	15,256	$ 2,203	$ 180	$ 0.319	$ 0.026
O&M (Services, RetroCx, BSC) Note 3	$ 9,581	$ 12,955	$ 22,536	$ 43,216	$ 58,464	4.5	2.6	2.3	370	Customers	59,894	458,969	6,311	$ 1,518	$ 198	$ 0.160	$ 0.021
PRIME	$ 537	$ 51	$ 587	$ 803	$ 15,774	1.5	26.9	18.2	72	Customers	1,896	9,479	-	N/A	N/A	$ 0.283	$ 0.057
Large - C& I Retrofit	**$ 43,732**	**$ 66,515**	**$ 110,247**	**$ 158,090**	**$ 223,915**	**3.6**	**2.0**	**1.8**	**2,091**		**167,258**	**1,758,660**	**21,567**	**$ 2,028**	**$ 193**	**$ 0.261**	**$ 0.025**
Small Business	$ 38,305	$ 48,099	$ 86,404	$ 113,513	$ 149,039	3.0	1.7	1.7	5,492	Customers	107,187	1,313,076	18,450	$ 2,076	$ 169	$ 0.357	$ 0.029
Subtotal C& I	**$ 90,706**	**$ 114,939**	**$ 205,644**	**$ 299,070**	**$ 408,015**	**3.3**	**2.0**	**1.8**	**8,070**		**294,555**	**3,380,909**	**44,452**	**$ 2,041**	**$ 178**	**$ 0.308**	**$ 0.027**
OTHER - EDUCATION *																	
SmartLiving Center® - Museum Partnerships	$ 400	$ -	$ 400														
EE Communities / Behavior Pilot	$ 1,500	$ -	$ 1,500														
K-8 Education	$ 325	$ -	$ 325														
Science Center	$ 166	$ -	$ 166														
Subtotal Education	**$ 2,392**	**$ -**	**$ 2,392**	**$ -**													

TABLE B
CL&P 2012 COMPARISON OF CONSERVATION PROGRAMS - ELECTRIC & OIL

COMPARISON OF CL&P CONSERVATION PROGRAMS FOR 2012

Program	Utility Costs (electric & oil) (000)	Customer Costs (000)	Total Resource Costs (000)	Electric System Benefit (000)	Total Resource Benefit (000)	Electric System B/C Ratio	Total Resource B/C Ratio	Statewide Total Resource B/C Ratio	# of Units	Units	Annualized Savings (MWh)	Lifetime Savings (MWh)	kW Impact (Y/E)	Demand Cost $/kW**	Demand Cost $/kW-yr**	Cost Rate $/kwh Annualize**	Utility Cost Ratio $/LT-kWh**
OTHER - PROGRAMS/REQUIREMENTS																	
Institute for Sustainable Energy (ECSU)	$ 448	$ -	$ 448														
Other Funding Requests	$ -	$ -	$ -														
Residential Loan Program	$ 2,051	$ -	$ 2,051														
C&I Loan Program	$ 500	$ -	$ 500														
C&LM Loan Defaults	$ 300	$ -	$ 300														
Total Other Programs/Requirements	**$ 3,299**	**$ -**	**$ 3,299**	**$ -**													
OTHER - LOAD MANAGEMENT																	
ISO Load Response Program	$ 3,500	$ -	$ 3,500	$ 3,500	$ 3,500	1.0	1.0		400	Customers	-	-	110,000	$ 32	$ 32	N/A	N/A
Subtotal Load Management	**$ 3,500**	**$ -**	**$ 3,500**	**$ 3,500**	**$ 3,500**	**1.0**	**1.0**				**-**	**-**	**110,000**	**$ 32**	**$ 32**		
OTHER - RENEWABLES & RD&D																	
Research, Development & Demonstration	$ 376	$ -	$ 376														
Subtotal Renewables & RD&D	**$ 376**	**$ -**	**$ 376**	**$ -**													
Administration	$ 1,200																
Marketing Plan	$ 500																
Planning and Evaluation	$ 2,990																
Information Technology	$ 1,950																
Energy Efficiency Board	$ 650																
Performance Management Fee	$ 8,133																
Subtotal Admin/Planning Expenditures	**$ 15,422**																
PROGRAM SUBTOTALS																	
Residential	**$ 60,171**										**184,597**	**1,143,501**	**16,049**				
C&I	**$ 95,519**										**294,555**	**3,380,909**	**154,452**				
Other*	**$ 15,746**										**-**	**-**	**-**				
TOTAL C&LM BUDGET	**$ 171,437**	**$ 131,900**	**$ 287,914**	**$ 393,853**	**$ 606,225**	**2.3**	**2.1**				**479,152**	**4,524,410**	**170,500**	**$ 2,776**	**$ 294**	**$ 0.358**	**$ 0.038**

* OTHER -includes ISE/ECSU, RD&D, Admin, Planning & Evaluation, IT, EEB and PMF
** Total Ratio Columns exclude ISO-NE Load Response

Note 1: Beginning in 2006, Retail Lighting and ENERGY STAR Appliances were combined into one program - Residential Retail Products.
Note 2: HES Cost Rates ($/kW, $/kW-Year, $/annual kWH, $/lifetime kWH) include funding for oil meaures. Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 3: O&M Services includes RetroCx, BSC budget and associated savings.
General Note: Costs and benefits associated with the gas programs that are delivered integrated with the electric programs are not included in the TRC analysis of the 2012 electric programs.
Gas program costs and benefits for integrated delivery programs are included in the 2012 Gas Plan.

TABLE B
CL&P 2012 COMPARISON OF CONSERVATION PROGRAMS - ELECTRIC ONLY

COMPARISON OF CL&P CONSERVATION PROGRAMS FOR 2012

Program	Electric Utility Costs (000)	Customer Costs (000)	Total Resource Costs (000)	Electric System Benefit (000)	Total Resource Benefit (000)	Electric System B/C Ratio	Total Resource B/C Ratio	Statewide Total Resource B/C Ratio	# of Units	Units	Annualized Savings (MWh)	Lifetime Savings (MWh)	kW Impact (Y/E)	Demand Cost $/kW**	Demand Cost $/kW-yr**	Cost Rate $/kwh Annualize**	Utility Cost Ratio $/LT-kWh**
RESIDENTIAL																	
Residential Retail Products Note 1	$ 10,960	$ 8,379	$ 19,339	$ 47,992	$ 82,666	4.4	4.3	4.2	3,916,115	Products	128,669	598,166	9,162	$ 1,196	$ 257	$ 0.085	$ 0.018
Appliance Rebate Program	$ 3,500	$ 2,000	$ 5,500	$ 6,505	$ 9,003	1.9	1.6	1.1	10,000	Products	8,000	80,000	720	$ 4,861	$ 486	$ 0.438	$ 0.044
Total - Consumer Products	**$ 14,460**	**$ 10,379**	**$ 24,839**	**$ 54,497**	**$ 91,669**	**3.8**	**3.7**	**3.6**			**136,669**	**678,166**	**9,882**	**$ 1,463**	**$ 295**	**$ 0.106**	**$ 0.021**
Residential New Construction	$ 1,271	$ 1,096	$ 2,367	$ 3,391	$ 5,863	2.7	2.5	1.5	729	Homes	2,512	43,726	521	$ 2,438	$ 140	$ 0.506	$ 0.029
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 2	$ 12,796	$ 4,508	$ 17,304	$ 18,488	$ 58,124	1.4	3.4	2.3	30,537	Cust/HVAC Rebates	21,719	224,916	4,024	$ 2,961	$ 286	$ 0.549	$ 0.053
HES Income Eligible	$ 14,308	$ 979	$ 15,287	$ 14,907	$ 39,053	1.0	2.6	1.9	25,193	Customers	23,697	196,693	1,621	$ 8,825	$ 1,063	$ 0.604	$ 0.073
Subtotal Residential	**$ 42,835**	**$ 16,962**	**$ 59,797**	**$ 91,284**	**$ 194,710**	**2.1**	**3.3**	**2.5**			**184,597**	**1,143,501**	**16,049**	**$ 2,669**	**$ 431**	**$ 0.232**	**$ 0.037**
COMMERCIAL & INDUSTRIAL																	
C&I LOST OPPORTUNITY																	
Energy Conscious Blueprint	$ 8,669	$ 325	$ 8,994	$ 27,467	$ 35,061	3.2	3.9	2.8	487	Customers	20,110	309,173	4,435	$ 1,955	$ 127	$ 0.431	$ 0.028
Total - Lost Opportunity	**$ 8,669**	**$ 325**	**$ 8,994**	**$ 27,467**	**$ 35,061**	**3.2**	**3.9**	**2.8**	**487**		**20,110**	**309,173**	**4,435**	**$ 1,955**	**$ 127**	**$ 0.431**	**$ 0.028**
C&I LARGE RETRO FIT																	
Energy Opportunities	$ 33,614	$ 53,510	$ 87,124	$ 114,071	$ 149,677	3.4	1.7	1.6	1,650	Customers	105,469	1,290,212	15,256	$ 2,203	$ 180	$ 0.319	$ 0.026
O&M (Services, RetroCx, BSC) Note 3	$ 9,581	$ 12,955	$ 22,536	$ 43,216	$ 58,464	4.5	2.6	2.3	370	Customers	59,894	458,969	6,311	$ 1,518	$ 198	$ 0.160	$ 0.021
PRIME	$ 537	$ 51	$ 587	$ 803	$ 15,774	1.5	26.9	18.2	72	Customers	1,896	9,479	-	N/A	N/A	$ 0.283	$ 0.057
Large - C& I Retrofit	**$ 43,732**	**$ 66,515**	**$ 110,247**	**$ 158,090**	**$ 223,915**	**3.6**	**2.0**	**1.8**	**2,091**		**167,258**	**1,758,660**	**21,567**	**$ 2,028**	**$ 193**	**$ 0.261**	**$ 0.025**
Small Business	$ 38,305	$ 48,099	$ 86,404	$ 113,513	$ 149,039	3.0	1.7	1.7	5,492	Customers	107,187	1,313,076	18,450	$ 2,076	$ 169	$ 0.357	$ 0.029
Subtotal C& I	**$ 90,706**	**$ 114,939**	**$ 205,644**	**$ 299,070**	**$ 408,015**	**3.3**	**2.0**	**1.8**	**8,070**		**294,555**	**3,380,909**	**44,452**	**$ 2,041**	**$ 178**	**$ 0.308**	**$ 0.027**
OTHER - EDUCATION *																	
SmartLiving Center® - Museum Partnerships	$ 400	$ -	$ 400														
EE Communities / Behavior Pilot	$ 1,500	$ -	$ 1,500														
K-8 Education	$ 325	$ -	$ 325														
Science Center	$ 166	$ -	$ 166														
Subtotal Education	**$ 2,392**	**$ -**	**$ 2,392**	**$ -**													

TABLE B
CL&P 2012 COMPARISON OF CONSERVATION PROGRAMS - ELECTRIC ONLY

COMPARISON OF CL&P CONSERVATION PROGRAMS FOR 2012

Program	Electric Utility Costs (000)	Customer Costs (000)	Total Resource Costs (000)	Electric System Benefit (000)	Total Resource Benefit (000)	Electric System B/C Ratio	Total Resource B/C Ratio	Statewide Total Resource B/C Ratio	# of Units	Units	Annualized Savings (MWh)	Lifetime Savings (MWh)	kW Impact (Y/E)	Demand Cost $/kW**	Demand Cost $/kW-yr**	Cost Rate $/kwh Annualize**	Utility Cost Ratio $/LT-kWh**
OTHER - PROGRAMS/REQUIREMENTS																	
Institute for Sustainable Energy (ECSU)	$ 448	$ -	$ 448														
Other Funding Requests	$ -	$ -	$ -														
Residential Loan Program	$ 2,051	$ -	$ 2,051														
C&I Loan Program	$ 500	$ -	$ 500														
C&LM Loan Defaults	$ 300	$ -	$ 300														
Total Other Programs/Requirements	**$ 3,299**	**$ -**	**$ 3,299**	**$ -**													
OTHER - LOAD MANAGEMENT																	
ISO Load Response Program	$ 3,500	$ -	$ 3,500	$ 3,500	$ 3,500	1.0	1.0		400	Customers	-	-	110,000	$ 32	$ 32	N/A	N/A
Subtotal Load Management	**$ 3,500**	**$ -**	**$ 3,500**	**$ 3,500**	**$ 3,500**	**1.0**	**1.0**				**-**	**-**	**110,000**	**$ 32**	**$ 32**		
OTHER - RENEWABLES & RD&D																	
Research, Development & Demonstration	$ 376	$ -	$ 376														
Subtotal Renewables & RD&D	**$ 376**	**$ -**	**$ 376**	**$ -**													
Administration	$ 1,200																
Marketing Plan	$ 500																
Planning and Evaluation	$ 2,990																
Information Technology	$ 1,950																
Energy Efficiency Board	$ 650																
Performance Management Fee	$ 8,133																
Subtotal Admin/Planning Expenditures	**$ 15,422**																
PROGRAM SUBTOTALS																	
Residential	**$ 47,264**										**184,597**	**1,143,501**	**16,049**				
C&I	**$ 95,519**										**294,555**	**3,380,909**	**154,452**				
Other*	**$ 15,746**										**-**	**-**	**-**				
TOTAL C&LM BUDGET	**$ 158,530**	**$ 131,900**	**$ 275,007**	**$ 393,853**	**$ 606,225**	**2.5**	**2.2**				**479,152**	**4,524,410**	**170,500**	**$ 2,562**	**$ 271**	**$ 0.331**	**$ 0.035**

* OTHER -includes ISE/ECSU, RD&D, Admin, Planning & Evaluation, IT, EEB and PMF
** Total Ratio Columns exclude ISO-NE Load Response

Note 1: Beginning in 2006, Retail Lighting and ENERGY STAR Appliances were combined into one program - Residential Retail Products.
Note 2: HES Cost Rates ($/kW, $/kW-Year, $/annual kWH, $/lifetime kWH) exclude $7M of funding for oil meaures. Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 3: O&M Services includes RetroCx, BSC budget and associated savings.
General Note: Costs and benefits associated with the gas programs that are delivered integrated with the electric programs are not included in the TRC analysis of the 2012 electric programs.
Gas program costs and benefits for integrated delivery programs are included in the 2012 Gas Plan.

TABLE B1
CL&P 2012 COMPARISON OF PROGRAM BENEFITS

		Electric System				Non-Electric Benefits				Total Benefits
Program	Rate Impact (Program Costs less DRIPE) (000)	Energy Benefits (000)	Capacity Benefits (000)	DRIPE (000)	Electric System Benefits (000)	Resource Benefits (000)	Non-Resource Benefits (000)	Emissions Benefits (000)	Total Non-Electric Benefits (000)	Total Resource Benefits (000)
RESIDENTIAL										
Residential Retail Products Note 1	$ (1,159)	$ 33,090	$ 2,783	$ 12,119	**$ 47,992**	$ -	$ 12,367	$ 22,307	**$ 34,674**	**$ 82,666**
Appliance Rebate Program	$ 2,373	$ 4,474	$ 404	$ 1,627	**$ 6,505**	$ -	$ -	$ 2,499	**$ 2,499**	**$ 9,003**
Total - Consumer Products	**$ 1,214**	**$ 37,564**	**$ 3,187**	**$ 13,746**	**$ 54,497**	**$ -**	**$ 12,367**	**$ 24,806**	**$ 37,172**	**$ 91,669**
Residential New Construction	$ 1,244	$ 2,161	$ 636	$ 594	**$ 3,391**	$ 1,521	$ 3	$ 947	**$ 2,472**	**$ 5,863**
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 2	$ 16,287	$ 11,497	$ 3,373	$ 3,618	**$ 18,488**	$ 32,091	$ 1,849	$ 5,696	**$ 39,636**	**$ 58,124**
HES Income Eligible	$ 15,477	$ 10,716	$ 629	$ 3,562	**$ 14,907**	$ 16,850	$ 1,097	$ 6,200	**$ 24,146**	**$ 39,053**
Subtotal Residential	**$ 34,222**	**$ 61,938**	**$ 7,825**	**$ 21,520**	**$ 91,284**	**$ 50,461**	**$ 15,316**	**$ 37,649**	**$ 103,426**	**$ 194,710**
COMMERCIAL & INDUSTRIAL										
C&I LOST OPPORTUNITY										
Energy Conscious Blueprint	$ 2,811	$ 17,402	$ 4,207	$ 5,859	**$ 27,467**	$ (245)	$ 205	$ 7,634	**$ 7,594**	**$ 35,061**
Total - Lost Opportunity	**$ 2,811**	**$ 17,402**	**$ 4,207**	**$ 5,859**	**$ 27,467**	**$ (245)**	**$ 205**	**$ 7,634**	**$ 7,594**	**$ 35,061**
C&I LARGE RETRO FIT										
Energy Opportunities	$ 5,238	$ 75,096	$ 10,599	$ 28,376	**$ 114,071**	$ (894)	$ 614	$ 35,886	**$ 35,606**	**$ 149,677**
O&M (Services, RetroCx, BSC) Note 3	$ (1,956)	$ 28,280	$ 3,399	$ 11,537	**$ 43,216**	$ (60)	$ 41	$ 15,268	**$ 15,249**	**$ 58,464**
PRIME	$ 316	$ 582	$ -	$ 220	**$ 803**	$ -	$ 14,609	$ 362	**$ 14,971**	**$ 15,774**
Large - C& I Retrofit	**$ 3,598**	**$ 103,959**	**$ 13,997**	**$ 40,134**	**$ 158,090**	**$ (954)**	**$ 15,264**	**$ 51,516**	**$ 65,826**	**$ 223,915**
Small Business	$ 10,701	$ 73,000	$ 12,909	$ 27,604	**$ 113,513**	$ (3,422)	$ 2,350	$ 36,598	**$ 35,526**	**$ 149,039**
Subtotal C& I	**$ 17,110**	**$ 194,360**	**$ 31,113**	**$ 73,596**	**$ 299,070**	**$ (4,622)**	**$ 17,820**	**$ 95,747**	**$ 108,945**	**$ 408,015**
OTHER - LOAD MANAGEMENT										
ISO Load Response Program	$ 3,500	$ -	$ 3,500	$ -	**$ 3,500**	$ -	$ -	$ -	**$ -**	**$ 3,500**
Subtotal Load Management	**$ 3,500**	**$ -**	**$ 3,500**	**$ -**	**$ 3,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,500**
Other (Educational, Other Programs/Requirements, RD&D, Admin & Planning)	21,489	-	-	-	-	-	$ -	$ -	$ -	$ -
TOTAL C&LM	**$ 76,321**	**$ 256,299**	**$ 42,439**	**$ 95,116**	**$ 393,853**	**$ 45,840**	**$ 33,136**	**$ 133,396**	**$ 212,372**	**$ 606,225**

Note 1: Beginning in 2006, Retail Lighting and ENERGY STAR Appliances were combined into one program - Residential Retail Products.
Note 2: Residential HVAC program renamed "CT Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 3: O&M Services includes RetroCx budget, BSC, and associated savings.
General Note: Costs and benefits associated with the gas programs that are delivered integrated with the electric programs are not included in the Total Resource Cost (TRC) analysis of the 2012 electric programs. Gas program costs and benefits for integrated delivery programs are included in the 2012 Gas Plan.

Table C
CL&P 2012 C&LM Budget Details - Increased Savings Model

CL&P C&LM BUDGET ($000)	CL&P Labor	Materials & Supplies	Outside Services	Contractor Labor	Incentives	Marketing	Other **	Administrative Expenses	TOTAL
Residential Retail Products	$ 260	$ 4	$ 1,200	$ 100	$ 8,586	$ 750	$ 35	$ 25	$ 10,960
Appliance Rebate Program	$ 130	$ 5	$ 50	$ 100	$ 3,555	$ 100	$ 35	$ 25	$ 4,000
Total - Consumer Products	**$ 390**	**$ 9**	**$1,250**	**$ 200**	**$ 12,141**	**$ 850**	**$ 70**	**$ 50**	**$ 14,960**
Residential New Construction	$ 174	$ 3	$ 148	$ 28	$ 1,435	$ 40	$ 5	$ 5	$ 1,838
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 1,200	$ 35	$ 435	$ 500	$ 16,985	$ 600	$ 75	$ 75	$ 19,905
HES Income Eligible	$ 800	$ 30	$ 953	$ 500	$ 16,131	$ 500	$ 50	$ 75	$ 19,039
Subtotal Residential	**$ 2,564**	**$ 77**	**$ 2,786**	**$ 1,228**	**$ 46,692**	**$ 1,990**	**$ 200**	**$ 205**	**$ 55,742**
COMMERCIAL & INDUSTRIAL									
C & I LOST OPPORTUNITY									
Energy Conscious Blueprint	$ 950	$ 10	$ 900	$ 321	$ 6,170	$ 200	$ 70	$ 48	$ 8,669
Total - Lost Opportunity	**$ 950**	**$ 10**	**$ 900**	**$ 321**	**$ 6,170**	**$ 200**	**$ 70**	**$ 48**	**$ 8,669**
C & I LARGE RETROFIT									
Energy Opportunities	$ 3,700	$ 50	$ 750	$ 1,500	$ 26,824	$ 600	$ 30	$ 160	$ 33,614
O&M (Service, RetroCx, BSC)	$ 1,200	$ 20	$ 1,000	$ 120	$ 6,961	$ 200	$ 30	$ 50	$ 9,581
PRIME	$ 45	$ 5	$ 20	$ 10	$ 394	$ 50	$ 3	$ 10	$ 537
Total - C&I Large Retrofit	**$ 4,945**	**$ 75**	**$ 1,770**	**$ 1,630**	**$ 34,179**	**$ 850**	**$ 63**	**$ 220**	**$ 43,732**
Small Business	$ 2,300	$ 40	$ 300	$ 900	$ 30,135	$ 600	$ 30	$ 4,000	$ 38,305
Subtotal C&I	**$ 8,195**	**$ 125**	**$ 2,970**	**$ 2,851**	**$ 70,484**	**$ 1,650**	**$ 163**	**$ 4,268**	**$ 90,706**
OTHER - EDUCATION									
SmartLiving Center® - Museum Partnerships	$ 28	$ 10	$ 347	$ -	$ -	$ 15	$ -	$ -	$ 400
EE Communities / Behavior Pilot	$ 305	$ -	$ 1,156	$ 15	$ -	$ 20	$ 2	$ 2	$ 1,500
K-8 Education	$ 84	$ 3	$ 231	$ -	$ -	$ 4	$ -	$ 3	$ 325
Science Center	$ -	$ -	$ 166	$ -	$ -	$ -	$ -	$ -	$ 166
Subtotal Education	**$ 417**	**$ 13**	**$ 1,900**	**$ 15**	**$ -**	**$ 39**	**$ 2**	**$ 5**	**$ 2,392**
OTHER - PROGRAMS/REQUIREMENTS									
Institute for Sustainable Energy (ECSU)	$ -	$ -	$ -	$ -	$ -	$ -	$ 448	$ -	$ 448
Other Funding Requests	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Residential Loan Program	$ 35	$ -	$ 2,013	$ 3	$ -	$ -		$ -	$ 2,051
C&I Loan Program	$ -	$ -	$ 500	$ -	$ -	$ -		$ -	$ 500
C&LM Loan Defaults	$ -	$ -	$ -	$ -	$ -	$ -	$ 300	$ -	$ 300
Subtotal Programs/Requirements	**$ 35**	**$ -**	**$ 2,513**	**$ 3**	**$ -**	**$ -**	**$ 748**	**$ -**	**$ 3,299**
OTHER - LOAD MANAGEMENT									
ISO Load Response Program	$ 341	$ 5	$ 743	$ 94	$ 2,295	$ 10	$ -	$ 12	$ 3,500
Power Factor	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Load Management	**$ 341**	**$ 5**	**$ 743**	**$ 94**	**$ 2,295**	**$ 10**	**$ -**	**$ 12**	**$ 3,500**
OTHER - RENEWABLES & RD&D									
Research, Development & Demonstration	$ 100	$ 2	$ 269	$ -	$ -	$ -	$ -	$ 5	$ 376
Subtotal Renewables & RD&D	**$ 100**	**$ 2**	**$ 269**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5**	**$ 376**
OTHER - ADMINISTRATIVE & PLANNING									
Administration	$ 1,059	$ 4		$ 90	$ -	$ -	$ 17	$ 30	$ 1,200
Marketing	$ 5	$ -		$ 15	$ -	$ 480	$ -	$ -	$ 500
Planning	$ 709	$ 6	$ 20	$ 5	$ -	$ -	$ 20	$ 19	$ 780
Evaluation	$ 194	$ 5	$ 2,001	$ -	$ -	$ -	$ 5	$ 5	$ 2,210
Information Technology	$ 550	$ 200	$ 1,120	$ -	$ -	$ -	$ -	$ 80	$ 1,950
Energy Efficiency Board	$ -	$ -	$ 650	$ -	$ -	$ -	$ -	$ -	$ 650
Performance Management Fee	$ -	$ -	$ -	$ -	$ -	$ -	$ 8,133	$ -	$ 8,133
Subtotal Admin/Planning Expenditures	**$ 2,517**	**$ 215**	**$ 3,791**	**$ 110**	**$ -**	**$ 480**	**$ 8,175**	**$ 134**	**$ 15,423**
PROGRAM SUBTOTALS									
Residential	$ 2,954	$ 88	$ 6,365	$ 1,255	$ 46,692	$ 2,406	$ 202	$ 210	**$ 60,171**
C&I	$ 8,604	$ 132	$ 4,547	$ 2,951	$ 72,779	$ 1,763	$ 463	$ 4,280	**$ 95,519**
Other*	$ 2,612	$ 217	$ 4,060	$ 95	$ -	$ -	$ 8,623	$ 139	**$ 15,747**
TOTAL C&LM BUDGET	**$ 14,170**	**$ 437**	**$ 14,972**	**$ 4,301**	**$ 119,471**	**$ 4,169**	**$ 9,288**	**$ 4,629**	**$ 171,437**

* Other -includes ISE/ECSU, RD&D, Admin, Planning & Evaluation, and IT

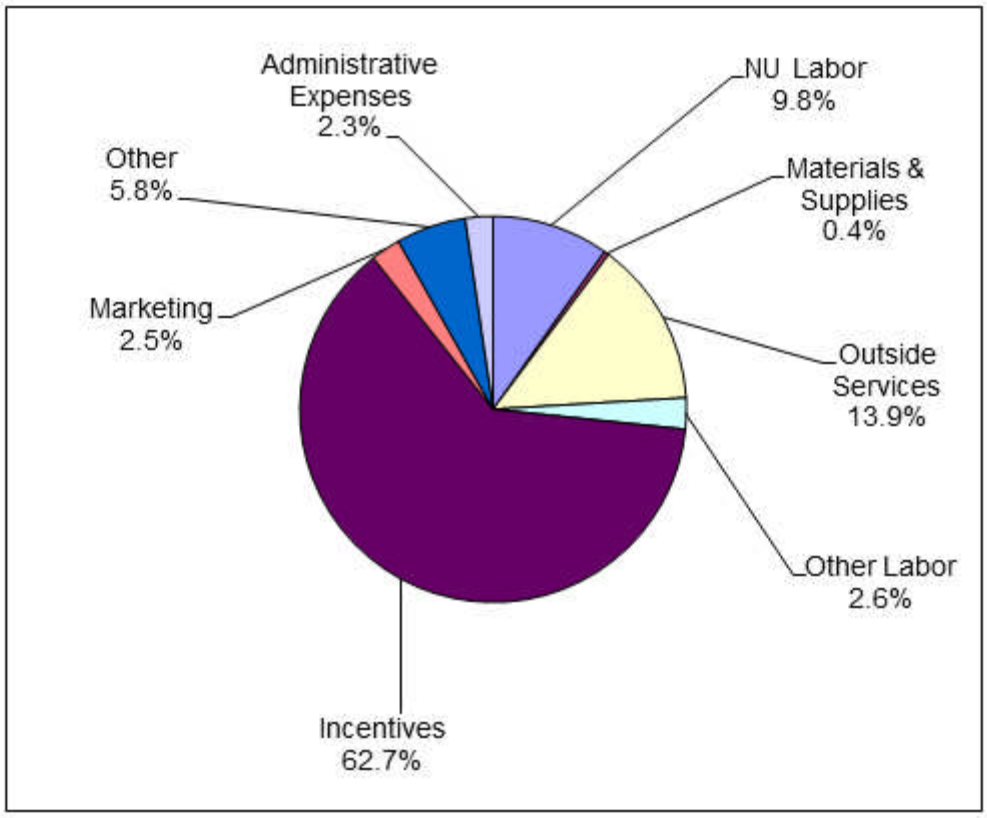
** Other includes Performance Management Fee, ECSU, Energy Conservation Loan Fund, Loan Defaults, Dues, Postage.

CL&P

2011 CONSERVATION & LOAD MANAGEMENT

C&LM Budget By Expense Class

Table C Pie Chart



Expense Classes		Budget	% of Budget
NU Labor	$	14,170	8.3%
Materials & Supplies	$	437	0.3%
Outside Services	$	14,972	8.7%
Other Labor	$	4,301	2.5%
Incentives	$	119,471	69.7%
Marketing	$	4,169	2.4%
Other	$	9,288	5.4%
Administrative Expenses	$	4,629	2.7%
Total	**$**	**171,437**	**100.00%**

Table D

CL&P Historical and Projected $ and kW

	Expenditures $										Load Savings kW									
RESIDENTIAL	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Budget	2012 Budget	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Retail Products Note 1	3,154,881	6,001,655	6,440,269	5,626,761	5,961,939	4,903,424	3,223,833	8,764,502	6,132,901	10,960,000	1,604	6,400	4,832	5,160	5,678	6,257	4,024	14,589	8,691	9,162
Appliance Retirement		1,446,975	2,034,265	1,188,636		268,935						1,042	1,437	443		235				
Appliance Rebate Program								3,615,349	-	4,000,000										720
Customer Initiated Projects		244,933	329,182									22	37							
Total - Consumer Products	**3,154,881**	**7,693,563**	**8,803,716**	**6,815,397**	**5,961,939**	**5,172,359**	**3,223,833**	**12,379,851**	**6,132,901**	**14,960,000**	**1,604**	**7,464**	**6,306**	**5,603**	**5,678**	**6,492**	**4,024**	**14,589**	**8,691**	**9,882**
Residential New Construction Note 2	1,115,726	767,514	1,187,496	1,688,185	1,414,189	1,563,639	494,394	1,034,433	1,460,024	1,838,050	476	268	1,885	2,225	505	521	256	339	584	521
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 3	1,462,685	1,438,871	2,029,289	4,313,563	5,467,875	7,167,887	7,949,519	22,409,603	17,749,370	19,905,000	972	2,188	2,856	3,151	2,520	3,261	2,220	5,054	5,086	4,024
HES Income Eligible	3,180,815	4,590,734	4,682,547	5,298,638	7,112,363	7,035,693	7,758,362	9,361,764	11,027,047	19,039,000	427	652	806	1,110	1,067	1,271	1,172	1,146	1,767	1,621
Subtotal RESIDENTIAL	**8,914,107**	**14,490,682**	**16,703,048**	**18,115,783**	**19,956,366**	**20,939,578**	**19,426,108**	**45,185,651**	**36,369,342**	**55,742,050**	**3,479**	**10,572**	**11,853**	**12,089**	**9,770**	**11,545**	**7,671**	**21,128**	**16,128**	**16,049**
COMMERCIAL & INDUSTRIAL																				
C&I LOST OPPORTUNITY																				
Energy Conscious Blueprint Note 4	10,410,843	14,479,658	12,468,319	9,448,615	13,084,740	18,460,585	6,756,126	8,033,028	8,759,606	8,669,250	10,750	21,714	10,655	8,771	9,354	8,279	5,331	4,039	4,237	4,435
Total - Lost Opportunity	**10,410,843**	**14,479,658**	**12,468,319**	**9,448,615**	**13,084,740**	**18,460,585**	**6,756,126**	**8,033,028**	**8,759,606**	**8,669,250**	**10,750**	**21,714**	**10,655**	**8,771**	**9,354**	**8,279**	**5,331**	**4,039**	**4,237**	**4,435**
C&I LARGE RETROFIT																				
C&I RFP	2,049,863	4,037,727	9,176,612								642	3,260	7,355							
Energy Opportunities Note 5	766,397	777,245	1,026,898	9,081,115	22,928,130	29,565,748	10,231,492	17,863,695	25,935,919	33,614,000	1,286	1,426	2,431	15,295	17,675	14,859	6,017	8,693	11,045	15,256
O&M (Service, RetroCx, BSC)	450,905	933,762	1,833,005	1,435,302	1,113,822	1,929,890	1,100,065	1,347,241	4,729,740	9,581,000	142	774	2,208	504	432	711	376	531	2,123	6,311
PRIME Note 6							394,290	476,627	488,087	536,550										
Municipal Energy & Schools Note 7	2,288,449	6,718,880	4,401,007								1,219	761	1,147							
Total - C&I Large Retrofit	**5,555,614**	**12,467,614**	**16,437,522**	**10,516,417**	**24,041,952**	**31,495,638**	**11,725,847**	**19,687,563**	**31,153,746**	**43,731,550**	**3,289**	**6,221**	**13,141**	**15,799**	**18,107**	**15,570**	**6,393**	**9,224**	**13,168**	**21,567**
Small Business	2,167,157	3,263,609	2,710,538	7,497,147	10,204,353	11,390,772	4,879,517	12,100,944	13,436,752	38,305,000	2,430	3,354	2,349	8,497	9,310	8,287	4,987	5,244	6,521	18,450
Subtotal C&I	**18,133,614**	**30,210,881**	**31,616,379**	**27,462,179**	**47,331,045**	**61,346,995**	**23,361,491**	**39,821,535**	**53,350,104**	**90,705,800**	**16,469**	**31,289**	**26,145**	**33,067**	**36,771**	**32,136**	**16,712**	**18,507**	**23,926**	**44,452**
OTHER -EDUCATION																				
Smart Living Center	292,526	61,519	80,760	86,739	207,200	107,047	92,465	131,950	400,000	400,350										
Science Center			200,000	207,200	67,142	214,403	207,171	-		166,000										
EESmarts* (K - 12 Education)	249,053	61,542	242,897	159,987	232,784	208,451	197,076	331,133	225,000	325,000										
EE Communities / Behavior Pilot							46,308	960,047	850,000	1,500,400										
Community Based Program (SWCT)	73,081	96,251	168,371	201,382	212,080															
Subtotal Education	**614,660**	**219,312**	**692,028**	**655,308**	**719,206**	**529,901**	**543,021**	**1,423,130**	**1,475,000**	**2,391,750**										
OTHER -PROGRAMS/REQUIREMENTS																				
Institute for Sustainable Energy (ECSU)	950,000	716,000	404,391	242,000	240,000	320,000	400,000	400,000	448,000	448,000										
Residential Loan Program							18,285	18,569,958	3,650,000	2,050,700										
C&I Loan Program							9,634	204,898	475,000	500,000										
Other Funding Requests								325,385	-	-										
C&LM Loan Defaults	-	139,710	128,126	71,592	57,267	37,923	105,822	110,056	135,000	300,000										
Subtotal Other Programs/Requirements	**950,000**	**855,710**	**532,517**	**313,592**	**297,267**	**357,923**	**533,741**	**19,610,297**	**4,708,000**	**3,298,700**										
OTHER - LOAD MANAGEMENT																				
ISO Load Response Program	2,436,621	140,233	1,411,769	1,241,601	491,060	456,025	102,909	2,864,364	3,000,000	3,500,000	45,951	29,900	60,755	23,576	16,467	17,294	13,296	118,432	110,000	110,000
Demand Reduction Note 8		118,454	62,067	12,663	9,513							263	160	43						
Power Factor		33,000	477,007	123,615	144,901	64,128						531	15,401	4,133	4,412	1,047				
Wait Until 8:00		209,639	100,000																	
Subtotal Load Management	**2,436,621**	**501,326**	**2,050,843**	**1,377,879**	**645,474**	**520,153**	**102,909**	**2,864,364**	**3,000,000**	**3,500,000**	**45,951**	**30,694**	**76,316**	**27,752**	**20,879**	**18,341**	**13,296**	**118,432**	**110,000**	**110,000**
OTHER - RENEWABLES & RD&D																				
Renewables Incentives		7,898	3,019																	
Research, Development & Demonstration	1,721,585	1,117,495	625,597	(22,769)	131,220	114,559	75,087	102,434	200,000	375,900										
Subtotal Renewables & RD&D	**1,721,585**	**1,125,393**	**628,616**	**(22,769)**	**131,220**	**114,559**	**75,087**	**102,434**	**200,000**	**375,900**										
OTHER - ADMINISTRATIVE & PLANNING																				
Administration	2,330,603	852,550	504,237	728,465	663,411	586,204	747,757	835,729	900,000	1,199,700										
Marketing Plan			284,419	67,020	420,292	3,618	5,804	63,349	176,651	500,000										
Planning and Evaluation	812,535	827,799	2,008,477	1,138,717	750,975	1,433,843	1,617,773	2,053,326	2,450,000	2,989,950										
Information Technology	307,548	701,153	811,572	1,812,738	1,656,432	1,636,204	1,268,936	1,810,543	1,700,000	1,950,000										
Energy Efficiency Board	247,321	98,984	316,021	255,176	309,122	476,793	368,509	431,860	400,000	650,000										
Audit			294,459																	
Performance Management Fee	2,180,501	3,937,752	3,866,548	4,056,741	4,788,385	3,903,735	2,239,767	5,474,571	5,216,455	8,132,693										
Admin/Planning Expenditures	**5,878,508**	**6,418,238**	**8,085,733**	**8,058,857**	**8,588,617**	**8,040,397**	**6,248,547**	**10,669,378**	**10,843,106**	**15,422,343**										
PROGRAM SUB-TOTALS																				
Residential	9,455,646	14,888,079	17,632,785	18,725,643	20,914,521	21,408,083	19,922,869	65,011,019	41,385,663	60,171,150	3,479	10,572	11,853	12,089	9,770	11,545	7,671	21,128	16,128	16,049
C&I	20,643,356	30,673,832	33,842,058	29,024,118	48,215,129	61,970,085	23,650,206	43,231,922	57,245,434	95,519,150	62,420	61,983	102,461	60,819	57,650	50,477	30,008	136,939	133,926	154,452
Other Note 9	8,550,093	8,259,631	8,834,321	8,211,068	8,539,545	8,471,338	6,717,830	11,433,848	11,314,455	15,746,243										
TOTAL (includes ISO Load Response)	**38,649,095**	**53,821,542**	**60,309,164**	**55,960,829**	**77,669,195**	**91,849,506**	**50,290,904**	**119,676,789**	**109,945,552**	**171,436,543**	**65,899**	**72,555**	**114,314**	**72,908**	**67,420**	**62,022**	**37,679**	**158,067**	**150,054**	**170,500**
TOTAL (excludes ISO Load Response)	**36,212,474**	**53,681,309**	**58,897,395**	**54,719,228**	**77,178,135**	**91,393,481**	**50,187,995**	**116,812,425**	**106,945,552**	**167,936,543**	**19,948**	**42,655**	**53,559**	**49,332**	**50,953**	**44,728**	**24,383**	**39,635**	**40,054**	**60,500**

Note 1: Includes Residential Lighting, Smart Living Catalog and Clothes Washers programs.
Note 2: Includes demand savings from the GEO Thermal Heat Pump and Heat Pump Water Heater programs.
Note 3: Includes demand savings from the Spectrum Heat program. In 2007, Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.
Note 4: Includes demand savings from the Custom Services program.
Note 5: Includes demand savings from the Express program.
Note 6: Previously included in Energy Conscious Blueprint
Note 7: Includes demand savings from the State Buildings programs.
Note 8: Included in Energy Opportunities
Note 9: ISO Load Management Programs Load Savings kW are included in yearly totals

Table D1

CL&P Historical and Projected Annual kWh and Lifetime kWh

	Annual Savings kWh (000's)										Lifetime Savings kWh (000's)									
RESIDENTIAL	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal	2003 Actual	2004 Actual	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Actual	2011 Goal	2012 Goal
Retail Products Note 1	12,365	70,088	59,864	64,556	71,908	65,971	42,424	153,834	115,565	128,669	138,487	653,176	453,814	495,351	515,108	542,079	240,352	730,452	444,923	598,166
Appliance Retirement		4,577	7,653	3,197		138						22,377	37,789	15,977		925				
Appliance Rebate Program										8,000										80,000
Customer Initiated Projects		284	476									4,713	8,040							
Total - Consumer Products	**12,365**	**74,949**	**67,993**	**67,753**	**71,908**	**66,109**	**42,424**	**153,834**	**115,565**	**136,669**	**138,487**	**680,266**	**499,643**	**511,328**	**515,108**	**543,004**	**240,352**	**730,452**	**444,923**	**678,166**
Residential New Construction Note 2	1,052	547	2,551	3,449	1,510	1,536	845	1,581	2,091	2,512	21,782	9,114	34,399	43,764	19,431	19,910	12,656	25,469	26,507	43,726
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 3	576	1,343	1,862	5,324	7,868	9,367	6,595	22,724	27,817	21,719	10,791	25,460	34,238	60,493	89,643	107,856	85,041	264,136	306,988	224,916
HES Income Eligible	4,971	8,554	8,757	9,604	11,163	12,495	12,135	12,538	17,627	23,697	84,526	135,997	107,224	105,089	109,864	115,014	111,730	104,256	137,298	196,693
Subtotal RESIDENTIAL	**18,964**	**85,393**	**81,163**	**86,130**	**92,449**	**89,507**	**61,999**	**190,678**	**163,100**	**184,597**	**255,586**	**850,837**	**675,504**	**720,674**	**734,046**	**785,784**	**449,778**	**1,124,313**	**915,716**	**1,143,501**
COMMERCIAL & INDUSTRIAL																				
C&I LOST OPPORTUNITY																				
Energy Conscious Blueprint Note 4	41,942	80,147	60,129	47,925	44,217	49,940	23,225	21,451	22,949	20,110	741,610	1,344,801	1,023,516	812,823	704,845	765,081	382,538	330,357	362,214	309,173
Total - Lost Opportunity	**41,942**	**80,147**	**60,129**	**47,925**	**44,217**	**49,940**	**23,225**	**21,451**	**22,949**	**20,110**	**741,610**	**1,344,801**	**1,023,516**	**812,823**	**704,845**	**765,081**	**382,538**	**330,357**	**362,214**	**309,173**
C&I LARGE RETROFIT																				
C&I RFP	3,447	20,606	45,530								60,381	362,541	811,018							
Energy Opportunities Note 5	5,785	5,832	11,656	94,067	103,936	94,799	48,645	62,208	84,405	105,469	96,507	99,608	156,284	1,664,677	1,466,673	1,227,472	587,275	769,087	1,031,073	1,290,212
O&M (Service, RetroCx, BSC)	991	3,553	9,124	4,301	3,388	9,265	3,117	3,872	19,146	59,894	10,201	38,613	101,711	62,462	46,154	86,719	28,640	32,401	177,093	458,969
PRIME Note 6							1,233	2,147	1,387	1,896							6,166	10,734	6,935	9,479
Municipal Energy & Schools Note 7	6,220	4,120	15,658								98,804	69,386	269,524							
Total - C&I Large Retrofit	**16,443**	**34,111**	**81,968**	**98,368**	**107,324**	**104,064**	**52,995**	**68,227**	**104,938**	**167,258**	**265,893**	**570,148**	**1,338,537**	**1,727,139**	**1,512,827**	**1,314,191**	**622,081**	**812,223**	**1,215,101**	**1,758,660**
Small Business	13,109	19,269	13,428	32,492	37,334	37,254	23,250	30,392	42,170	107,187	221,042	328,965	233,226	561,280	468,516	457,376	275,112	376,215	493,393	1,313,076
Subtotal C&I	**71,494**	**133,527**	**155,525**	**178,785**	**188,875**	**191,258**	**99,470**	**120,071**	**170,057**	**294,555**	**1,228,545**	**2,243,914**	**2,595,279**	**3,101,242**	**2,686,188**	**2,536,648**	**1,279,730**	**1,518,795**	**2,070,708**	**3,380,909**
OTHER -EDUCATION																				
Smart Living Center																				
Science Center																				
EESmarts* (K - 12 Education)																				
EE Communities / Behavior Pilot																				
Community Based Program (SWCT)																				
Subtotal Education																				
OTHER -PROGRAMS/REQUIREMENTS																				
Institute for Sustainable Energy (ECSU)																				
Residential Loan Program																				
C&I Loan Program																				
C&LM Loan Defaults																				
Subtotal Other Programs/Requirements																				
OTHER - LOAD MANAGEMENT																				
ISO Load Response Program	670										6,700									
Demand Reduction Note 8		962	130	2								9,623	1,886	25						
Power Factor																				
Wait Until 8:00																				
Subtotal Load Management	**670**	**962**	**130**	**2**							**6,700**	**9,623**	**1,886**	**25**						
OTHER - RENEWABLES & RD&D																				
Renewables Incentives																				
Research, Development & Demonstration																				
Subtotal Renewables & RD&D																				
OTHER - ADMINISTRATIVE & PLANNING																				
Administration																				
Marketing Plan																				
Planning and Evaluation																				
Information Technology																				
Energy Efficiency Board																				
Audit																				
Performance Management Fee																				
Admin/Planning Expenditures																				
PROGRAM SUB-TOTALS																				
Residential	18,964	85,393	81,163	86,130	92,449	89,507	61,999	190,678	163,100	184,597	255,586	850,837	675,504	720,674	734,046	785,784	449,778	1,124,313	915,716	1,143,501
C&I	72,164	134,489	155,655	178,787	188,875	191,258	99,470	120,071	170,057	294,555	1,235,245	2,253,537	2,597,165	3,101,267	2,686,188	2,536,648	1,279,730	1,518,795	2,070,708	3,380,909
Other Note 9																				
TOTAL (includes ISO Load Response)	**91,128**	**219,882**	**236,818**	**264,917**	**281,324**	**280,765**	**161,468**	**310,748**	**333,157**	**479,152**	**1,490,831**	**3,104,374**	**3,272,669**	**3,821,941**	**3,420,234**	**3,322,432**	**1,729,508**	**2,643,108**	**2,986,424**	**4,524,410**
TOTAL (excludes ISO Load Response)	**90,458**	**219,882**	**236,818**	**264,917**	**281,324**	**280,765**	**161,468**	**310,748**	**333,157**	**479,152**	**1,484,131**	**3,104,374**	**3,272,669**	**3,821,941**	**3,420,234**	**3,322,432**	**1,729,508**	**2,643,108**	**2,986,424**	**4,524,410**

Note 1: Includes Residential Lighting, Smart Living Catalog and Clothes Washers programs.

Note 2: Includes demand savings from the GEO Thermal Heat Pump and Heat Pump Water Heater programs.

Note 3: Includes demand savings from the Spectrum Heat program. In 2007, Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.

Note 4: Includes demand savings from the Custom Services program.

Note 5: Includes demand savings from the Express program.

Note 6: Previously included in Energy Conscious Blueprint

Note 7: Includes demand savings from the State Buildings programs.

Note 8: Included in Energy Opportunities

Note 9: ISO Load Management Programs Load Savings kW are included in yearly totals

THE CONNECTICUT LIGHT AND POWER COMPANY

2012 Management Incentive Performance Indicators and Incentive Matrix

CL&P and the EEB recognize that having clear indicators and metrics of performance are helpful in delivering quality programs to Connecticut consumers. The following is a table of performance and incentive metrics developed by the utilities with input from the EEB, the Board consultants and the Department. These performance and incentive metrics apply to the programs delineated in this Plan. The projected CL&P Performance Incentive is **$8,132,693** and is based on achieving **100%** of all performance targets and earning an incentive of **5%** of the total C&LM program budget of **$162,653,850** as shown on Table A (exclusive of Energy Efficiency Board costs, management incentives and audit costs). The actual earned amount will be calculated on a sliding scale based on the percent of goal achieved and the actual total expenditures, based on the following performance range:

-Performance Incentive Illustration-

Performance % Minimum	Pretax Incentive	Pre-tax Incentive
70	2%	$3,253,077
80	3%	$4,879,616
90	4%	$6,506,154
100	**5%**	**$8,132,693**
110	6%	$9,759,231
120	7%	$11,385,770
130	8%	$13,012,308
Maximum		
Incentive Basis Budget	$162,653,850	

Goals will be prorated based on actual over/under spend of budget in the event actual spending is over/under 5% of budget.

SECTOR Program		Performance Indicators				Incentive Metrics			
						Incentive Metric	Target Goal	Weight	Incentive
RESIDENTIAL									
		Program Name	**LT-kWh**	**kW**	**% (1)**				
Residential Programs (Sector Level) Sector Budget	**$55,742**	Retail Products	678,166,100	9,882	59.5%	Sum of Electric System Benefit from Residential programs	Electric System Benefit from Residential programs **$90,913**	0.1650	**$1,463,885**
		New Construction	43,726,154	521	3.8%				
		HES	224,915,627	4,024	20.2%				
		HES Income Eligible	196,692,996	1,621	16.5%				
		Total	1,143,500,876	16,049					
		Savings Rate	$ 0.07160 / kWh	$ 563.05 / kW					
		Savings	$ 81,876	$ 9,036					
		(1) percent of target goal							
Net Electric System Benefit - Res.		Electric System Benefit less Program Costs			$35,171		**$35,171**	0.1650	**$1,463,885**
Home Energy Solutions	**$19,905**	Electric Savings LTkWh :	224,915,627			Energy Savings included in appropriate sector level metric			
		Demand Savings kw :	4,024						
		Increase average HES Participant savings by 20% for all fuels				Increase average HES savings by 20%	Achieve 20% average increase in HES per participant savings across all fuels	0.0800	**$650,615**
		For 10% of HES participants achieve 25% overall reduction in total energy savings; based on the average energy usage of HES participants				Achieve deep savings of 25%	Achieve minimum savings of 25% across all fuels in 10% of HES participants	0.0400	**$325,308**
EE Communities	**$1,500**	HES Coordination with community tasks forces and vendors to bring in more HES Projects (projects completed from outside of the utilities)				Increase customer participation			
Residential New Construction	**$1,838**	Electric Savings LTkWh :	43,726,154			Energy Savings included in appropriate sector level metric			
		Demand Savings kw :	521						
HES Income Eligible	**$19,039**	Electric Savings LTkWh :	196,692,996			Energy savings included in appropriate sector level metric			
		Demand Savings kW :	1,621						
		Fully expend 2012 HES-IE Budget. This is a penalty metric. Companies must expend at least 88% of budget to avoid the penalty. Above 88% the penalty is scaled with a 10% reduction in the penalty for each one percent increase in budget spent above 88%; Expending 98% will avoid the penalty. The budget will be adjusted and pro-rated based on final year-end spending, net of ARRA spending impacts. The EEB acknowledges the high priority for the spending of any remaining ARRA federal stimulus monies through March 2012 and the important support and resources the Companies are dedicating to that effort. Any under-expended HES-IE funding from 2012 will be carry forward to 2013, which would be in addition to the parity-level of HES-IE funding in 2013.				Fully expend 2012 HES-IE Budget	The penalty below 88% is -.05	0	**$0**
		Alignment of HES and HES-IE BPI Certfications One person in each crew with both BPI Building Analyst 1 and Envelop Specialist certifications by 6/30/12. By 9/30/12 each crew will have received training and be able to provide duct sealing services as per HES guidelines. Each crew will have the necessary testing and diagnostic equipment to perform duct sealing.				HES-IE Crew member Certifications and Duct Sealing Training	1 member of each crew certified by June 30, 2012 Duct Sealing Training and able/equipped by 9/30/12	0.03	**$243,981**
Retail Products	**$10,960**	Electric Savings LTkWh :	598,166,100			Energy savings included in appropriate sector level metric			
		Demand Savings kW :	9,162						

SECTOR Program		Performance Indicators				Incentive Metrics			
						Incentive Metric	Target Goal	Weight	Incentive
COMMERCIAL & INDUSTRIAL (C&I)									
		Program Name	**LT-kWh**	**kW**	**% (1)**				
C&I Programs (Sector Level) Sector Budget	**$90,706**	Energy Conscious Blueprint	309,173,450	4,435	9.3%	Total Electric System Benefit from C&I programs	Electric System Benefit from C&I programs **$270,388**	0.2100	**$1,707,865**
		Energy Opportunities	1,290,212,047	15,256	37.6%				
		O&M	458,968,506	6,311	13.7%				
		PRIME	9,479,141	-	0.2%				
		Small Business	1,313,075,863	18,450	39.2%				
		Total	3,380,909,006	44,452					
		Savings Rate	$ 0.06857 / kWh	$ 867.64 / kW					
		Savings	$ 231,820	$ 38,568					
		(1) percent of target goal							
Net Electric System Benefit- C&I		Electric System Benefit less Program Costs			$179,682		**$179,682**	0.2100	**$1,707,865**
C&I Market Segmentation	**$0**	The Companies will develop a plan which includes a protocol for defining market penetration and segmentation and establishing long term goals in collaboration with the EEB (EO and SBEA)							
Energy Opportunities	**$33,614**	1) Percentage of EO signed projects that incorporate performance contracting (and/or 3rd Party Financing, including utility capital)					**10%** of the signed projects will incorporate performance contracting (and/or 3rd Party Financing, including utility capital)	0.0200	**$162,654**
		2) Percentage of projects participating in the Comprehensive Initiative receiving comprehensive incentive					**15%** of the signed projects will be comprehensive projects	0.0200	**$162,654**
Energy Conscious Blueprint	**$8,669**	1) Number of new construction/major renovation projects that exceed the new construction State Energy Code baseline by at least 30 % or follow the whole building performance track. 2) The companies will develop a plan to transition into IECC 2012 (ASHRAE 2010) in collaboration with the EEB: a) Awareness: Prepare the market by working with the A/E community, the trade communities; specifiers and inspectors b) Develop and deliver a series of code training sessions for the A/E and trade communities C) Develop and deliver a series of training sessions on a variety of subjects relating to Integrated Design and High Performance Buildings (including Net Zero buildings) and code					**40%** of signed contracts exceed code or are whole building performance track project	0.020	**$162,654**
Small Business	**$38,305**	Electric Saving LTkWh : 1,313,075,863 Demand Saving kW : 18,450 Number of signed projects participating in the "Comprehensive" Initiative. (i.e., 2 or more end uses) receiving comprehensive performance incentive				Energy savings included in appropriate sector level metric	**15%** of the signed projects will be comprehensive projects	0.02	**$162,654**
O&M / RCx	**$9,581**	1) The Companies will develop and promote a Sustainable Energy Management Plan and Guide which includes benchmarking, the use of dashboards, and an implementation plan including Retro-commissioning in collaboration with the EEB.					Develop the Sustainable Energy Mgmt Guide and enroll 100 customers	0.02	**$162,654**
Total of Incentives								**1.00000**	**$8,132,693**

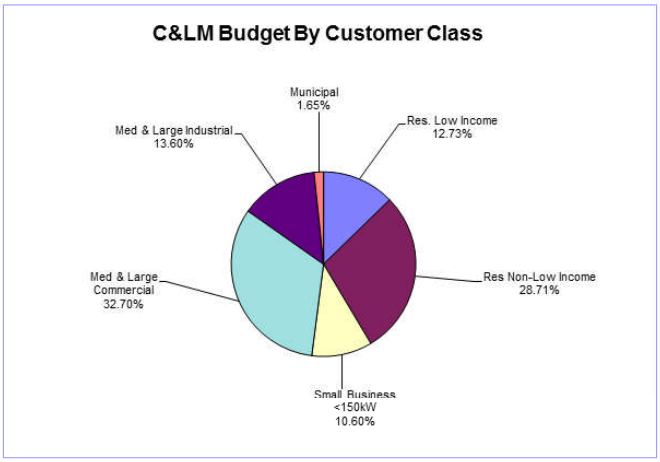
Table A
UI 2012 Proposed C&LM Budget

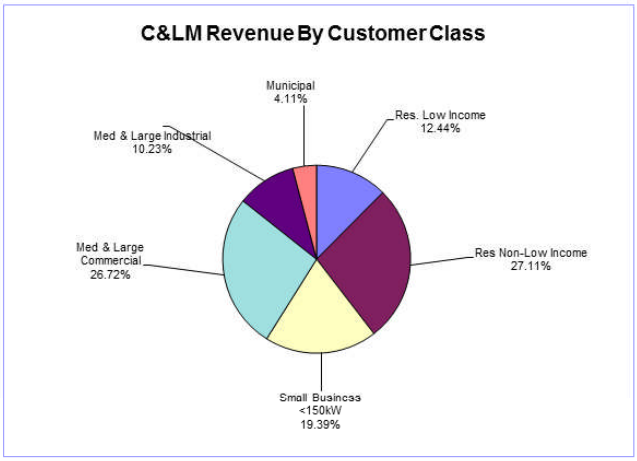
UI C&LM BUDGET	2011 UI REVISED BASE BUDGET 3/15/2011	2012 UI PROPOSED BASE BUDGET 9/1/2011	2012 UI PROPOSED INCREASED SAVINGS BUDGET 9/1/2011	2013 UI PROPOSED BASE BUDGET 9/1/2011
RESIDENTIAL				
Residential Retail Products	$ 2,133,216	$ 1,755,855	3,445,304	1,744,913
Total - Consumer Products	**$ 2,133,216**	**$ 1,755,855**	**$ 3,445,304**	**$ 1,744,913**
Residential New Construction	$ 215,440	$ 177,329	$ 177,329	$ 176,224
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 2,960,781	$ 2,281,658	$ 7,364,631	$ 2,267,440
HES Income Eligible	$ 2,498,996	$ 2,118,093	$ 5,038,002	$ 2,104,894
Subtotal RESIDENTIAL	**$ 7,808,433**	**$ 6,332,935**	**$ 16,025,266**	**$ 6,293,471**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 3,174,527	$ 2,386,221	$ 3,882,818	$ 2,371,352
Total - Lost Opportunity	**$ 3,174,527**	**$ 2,386,221**	**$ 3,882,818**	**$ 2,371,352**
C&I LARGE RETROFIT				
Energy Opportunities	$ 3,811,021	$ 2,957,319	$ 10,529,387	$ 2,938,891
O&M (Services, RetroCx, BSC)	$ 429,667	$ 631,298	$ 3,776,044	$ 627,364
PRIME	$ 86,008	$ 116,141	$ 402,385	$ 115,417
Total - C&I Large Retrofit	**$ 4,326,696**	**$ 3,704,759**	**$ 14,707,816**	**$ 3,681,673**
Small Business	$ 2,717,634	$ 2,227,636	$ 4,512,339	$ 2,213,754
Subtotal C&I	**$ 10,218,857**	**$ 8,318,616**	**$ 23,102,973**	**$ 8,266,779**
OTHER - EDUCATION				
SmartLiving Center®	$ 459,246	$ 481,746	$ 481,746	$ 481,746
EE Communities / Behavioral Pilot	$ 176,822	$ 300,000	$ 300,000	$ 300,000
Science Center	$ -	$ 42,000	$ 42,000	$ 42,000
K - 8 Education	$ 401,825	$ 401,825	$ 401,825	$ 401,825
Subtotal Education	**$ 1,037,893**	**$ 1,225,571**	**$ 1,225,571**	**$ 1,225,571**
OTHER - PROGRAMS/REQUIREMENTS				
Institute for Sustainable Energy (ECSU)	$ 112,000	$ 112,000	$ 112,000	$ 112,000
Residential Loan Program (Includes ECLF)	$ 589,087	$ 347,280	$ 347,280	$ 328,755
C&I Loan Program	$ 50,000	$ 50,000	$ 173,000	$ 50,000
C&LM Loan Defaults	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Subtotal Programs/Requirements	**$ 801,087**	**$ 559,280**	**$ 682,280**	**$ 540,755**
OTHER - LOAD MANAGEMENT				
ISO Load Response Program Support	$ -	$ 1,376,000	$ 1,376,000	$ 1,100,000
Subtotal Load Management	**$ -**	**$ 1,376,000**	**$ 1,376,000**	**$ 1,100,000**
OTHER - RENEWABLES & RD&D				
Research, Development & Demonstration	$ 125,000	$ 225,000	$ 225,000	$ 225,000
Subtotal Renewables & RD&D	**$ 125,000**	**$ 225,000**	**$ 225,000**	**$ 225,000**
OTHER - ADMINISTRATIVE & PLANNING				
Administration	$ 646,635	$ 750,000	$ 750,000	$ 782,163
Planning and Evaluation	$ 308,819	$ 316,765	$ 316,765	$ 332,332
Evaluation, Outside Services	$ 430,000	$ 570,000	$ 570,000	$ 570,000
Information Technology	$ 243,000	$ 342,500	$ 342,500	$ 342,500
EEB	$ 210,000	$ 300,000	$ 350,000	$ 300,000
2011 Performance Management Fee	$ 1,083,486	$ -	$ -	$ -
2012 Performance Management Fee	$ -	$ 1,003,333	$ 2,243,318	$ -
2013 Performance Management Fee	$ -	$ -	$ -	$ 986,429
Marketing Plan	$ 50,000	$ 50,000	$ 250,000	$ 50,000
Admin/Planning Expenditures	**$ 2,971,940**	**$ 3,332,598**	**$ 4,822,583**	**$ 3,363,424**
PROGRAM SUB-TOTALS				
Residential	$ 9,348,199	$ 7,781,037	$ 17,633,368	$ 7,723,048
C&I	$ 10,456,071	$ 9,969,365	$ 24,916,722	$ 9,641,528
Other*	$ 3,158,940	$ 3,619,598	$ 4,909,583	$ 3,650,424
TOTAL C&LM BUDGET	**$ 22,963,210**	**$ 21,370,000**	**$ 47,459,673**	**$ 21,015,000**

* OTHER -EDUCATION is primarily allocated to residential programs.

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT BUDGET PIES
INCREASED SAVINGS
TABLE A





Customer Class		Budget	% of Total C&LM Budget	% of Residential & C&I Budget	% of Residential & C&I Revenue	Difference
Res. Low Income	$	5,416,249	11.41%	12.73%	12.44%	0.29%
Res Non-Low Income	$	12,217,119	25.74%	28.71%	27.11%	1.60%
Residential Sub-total	$	17,633,368	37.15%	41.44%	39.55%	1.89%
Small Business <150kW	$	4,512,339	9.51%	10.60%	19.39%	-8.79%
Med & Large Commercial	$	13,915,089	29.32%	32.70%	26.72%	5.98%
Med & Large Industrial	$	5,786,909	12.19%	13.60%	10.23%	3.37%
Municipal	$	702,385	1.48%	1.65%	4.11%	-2.46%
C & I Sub-total	$	24,916,722	52.50%	58.56%	60.45%	-1.89%
Sub-total for Residential and C&I	$	42,550,090	89.66%	100.00%	100.00%	0.00%
Other Expenditures	$	4,909,583	10.34%			
Other Expenditures Sub-total	$	4,909,583	10.34%			
GRAND TOTAL *	**$**	**47,459,673**	**100%**			

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
COMPARISON OF UI CONSERVATION PROGRAMS
INCLUDES DRIPE AND CO [2]
INCREASED SAVINGS
TABLE B

Program	Utility Costs 2012	Customer Cost 2012	Total Resource Cost 2012	Electric System Benefit 2012	Total Resource Benefit 2012	Electric System B/C Ratio	Total Resource B/C Ratio	Goals/# Units	Units of Measure	Annualized Savings kWh	Lifetime Savings kWh	Load Savings kW	Demand Cost $/kW	Demand Cost $/kW yr	Utility Cost Rate $/kWh Annualized	Utility Cost Rate $/kWh Lifetime
Residential Retail Products	$ 3,445,304	$ 1,291,087	$ 4,736,391	$ 11,666,506	$ 19,627,226	3.39	4.14	1,032,118	Bulbs, Fixtures	30,634,720	142,177,199	2,757.1	$ 1,250	$ 269	$ 0.1125	$ 0.024
TOTAL - CONSUMER PRODUCTS	**$ 3,445,304**	**$ 1,291,087**	**$ 4,736,391**	**$ 11,666,506**	**$ 19,627,226**	**3.39**	**4.14**			**30,634,720**	**142,177,199**	**2,757.1**	**$ 1,250**	**$ 269**	**$ 0.1125**	**$ 0.024**
Residential New Construction	$ 177,329	$ 154,071	$ 331,400	$ 349,378	$ 434,448	1.97	1.31	113	No of Homes	241,509	2,941,285	103.0	$ 1,722	$ 141	$ 0.7343	$ 0.060
Home Energy Solutions	$ 7,364,631	$ 951,349	$ 8,315,980	$ 8,223,480	$ 24,577,596	1.12	2.96	8,494	No of Homes	8,282,425	84,133,117	2,223.8	$ 3,312	$ 326	$ 0.8892	$ 0.088
HES Income Eligible	$ 5,038,002	$ 641,466	$ 5,679,468	$ 4,482,847	$ 14,866,726	0.89	2.62	7,568	Customers	5,652,316	65,303,756	475.0	$ 10,606	$ 918	$ 0.8913	$ 0.077
SUB-TOTAL RESIDENTIAL	**$ 16,025,266**	**$ 3,037,972**	**$ 19,063,238**	**$ 24,722,211**	**$ 59,505,995**	**1.54**	**3.12**			**44,810,970**	**294,555,356**	**5,558.9**	**$ 2,883**	**$ 439**	**$ 0.3576**	**$ 0.054**
Energy Conscious Blueprint (a)	$ 3,882,818	$ 1,502,953	$ 5,385,771	$ 15,132,018	$ 19,688,014	3.90	3.66	129	Projects	11,729,327	179,590,966	1,971.6	$ 1,969	$ 129	$ 0.3310	$ 0.022
TOTAL - LOST OPPORTUNITY	**$ 3,882,818**	**$ 1,502,953**	**$ 5,385,771**	**$ 15,132,018**	**$ 19,688,014**	**3.90**	**3.66**			**11,729,327**	**179,590,966**	**1,971.6**	**$ 1,969**	**$ 129**	**$ 0.3310**	**$ 0.022**
Energy Opportunities	$ 10,702,387	$ 22,075,764	$ 32,778,150	$ 36,260,274	$ 47,519,162	3.39	1.45	273	Projects	33,593,977	422,633,262	4,658.3	$ 2,298	$ 183	$ 0.3186	$ 0.025
O&M																
Services (BSC, Training, RetroX)	$ 3,776,044	$ 2,679,182	$ 6,455,226	$ 6,179,844	$ 8,461,087	1.64	1.31	141	Projects	9,072,327	67,026,822	1,365.9	$ 2,764	$ 374	$ 0.4162	$ 0.056
PRIME	$ 402,385	$ -	$ 323,000	$ 547,102	$ 791,071	1.36	2.45	64	Projects	1,292,000	6,460,000	-	$ -	$ -	$ 0.3114	$ 0.062
TOTAL - C&I LARGE RETROFIT	**$ 14,880,816**	**$ 24,754,945**	**$ 39,556,376**	**$ 42,987,220**	**$ 56,771,319**	**2.89**	**1.44**			**43,958,304**	**496,120,083**	**6,024.2**	**$ 2,470**	**$ 219**	**$ 0.3385**	**$ 0.030**
Small Business	$ 4,512,339	$ 5,745,466	$ 10,257,805	$ 10,695,135	$ 13,887,509	2.37	1.35	400	Projects	9,597,396	121,106,581	1,599.3	$ 2,821	$ 224	$ 0.4702	$ 0.037
SUB-TOTAL C&I	**$ 23,275,973**	**$ 32,003,365**	**$ 55,199,953**	**$ 68,814,373**	**$ 90,346,842**	**2.96**	**1.64**			**65,285,027**	**796,817,631**	**9,595.1**	**$ 2,426**	**$ 199**	**$ 0.3565**	**$ 0.029**
SmartLiving Center®	$ 481,746							15,000	Customers							
EE Communities / Behavioral Pilot	$ 300,000															
Science Center	$ 42,000															
K-8 Education	$ 401,825							2,000	Curriculum							
SUB-TOTAL EDUCATION	**$ 1,225,571**															
Institute for Sustainable Energy (ECSU)	$ 112,000															
Residential Loan Program (Includes ECLF)	$ 347,280															
C&LM Loan Defaults	$ 50,000															
SUB-TOTAL PROGRAMS/REQUIREMENTS	**$ 509,280**															
ISO Load Response Program Support	$ 1,376,000											34,000.0	$ 40	$ 40		
SUB-TOTAL LOAD MANAGEMENT	**$ 1,376,000**											**34,000.0**	**$ 40**	**$ 40**		
Research, Development & Demonstration	$ 225,000															
SUB-TOTAL RENEWABLES AND RD&D	**$ 225,000**															
Administration	$ 750,000															
Planning & Evaluation	$ 316,765															
Evaluation, Outside Services	$ 570,000															
Information Technology	$ 342,500															
EEB	$ 350,000															
2012 Performance Management Fee	$ 2,243,318															
Marketing Plan	$ 250,000															
SUB-TOTAL ADMIN & PLANNING	**$ 4,822,583**															
PROGRAM SUB-TOTALS																
RESIDENTIAL	**$ 17,633,368**	**$ 3,037,972**	**$ 19,063,238**	**$ 24,722,211**	**$ 59,505,995**	**1.40**	**3.12**			**44,810,970**	**294,555,356**	**5,558.9**	**$ 3,172**	**$ 483**	**$ 0.3935**	**$ 0.060**
COMMERCIAL & INDUSTRIAL	**$ 24,916,722**	**$ 32,003,365**	**$ 55,199,953**	**$ 68,814,373**	**$ 90,346,842**	**2.76**	**1.64**			**65,285,027**	**796,817,631**	**9,595.1**	**$ 2,597**	**$ 213**	**$ 0.3817**	**$ 0.031**
OTHER *	**$ 4,909,583**	**$ -**	**$ -**	**$ -**	**$ -**							**34,000.0**				
TOTAL C&LM BUDGET Note 2	**$ 47,459,673**	**$ 35,041,337**	**$ 74,263,191**	**$ 93,536,584**	**$ 149,852,837**	**1.97**	**2.02**			**110,095,997**	**1,091,372,987**	**49,154.1**	**$ 3,041**	**$ 307**	**$ 0.4311**	**$ 0.043**

Notes:
(a) Energy Blueprint includes Motors and Cool Choice

* Other - Education is primarily allocated to Residential Programs

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
COMPARISON OF UI CONSERVATION PROGRAMS
INCLUDES DRIPE AND CO [2]
INCREASED SAVINGS - ELECTRIC ONLY
TABLE B

Program	Electric System Costs 2012[(b)]	Total Utility Costs 2012	Customer Cost 2012	Total Resource Cost 2012	Electric System Benefit 2012	Total Resource Benefit 2012	Electric System B/C Ratio[(b)]	Total Resource B/C Ratio	Goals/# Units	Units of Measure	Annualized Savings kWh	Lifetime Savings kWh	Load Savings kW	Demand Cost $/kW[(b)]	Demand Cost $/kW yr[(b)]	Utility Cost Rate $/kWh Annualized[(b)]	Utility Cost Rate $/kWh Lifetime[(b)]
Residential Retail Products	$ 3,445,304	$ 3,445,304	$ 1,291,087	$ 4,736,391	$11,666,506	$ 19,627,226	3.39	4.14	1,032,118	Bulbs, Fixtures	30,634,720	142,177,199	2,757.1	$ 1,250	$ 269	$ 0.1125	$ 0.024
TOTAL - CONSUMER PRODUCTS	**$ 3,445,304**	**$ 3,445,304**	**$ 1,291,087**	**$ 4,736,391**	**$11,666,506**	**$ 19,627,226**	**3.39**	**4.14**			**30,634,720**	**142,177,199**	**2,757.1**	**$ 1,250**	**$ 269**	**$ 0.1125**	**$ 0.024**
Residential New Construction	$ 177,329	$ 177,329	$ 154,071	$ 331,400	$ 349,378	$ 434,448	1.97	1.31	113	No of Homes	241,509	2,941,285	103.0	$ 1,722	$ 141	$ 0.7343	$ 0.060
Home Energy Solutions	$ 4,652,878	$ 7,364,631	$ 951,349	$ 8,315,980	$ 8,223,480	$ 24,577,596	1.77	2.96	8,494	No of Homes	8,282,425	84,133,117	2,223.8	$ 2,092	$ 206	$ 0.5618	$ 0.055
HES Income Eligible	$ 3,594,468	$ 5,038,002	$ 641,466	$ 5,679,468	$ 4,482,847	$ 14,866,726	1.25	2.62	7,568	Customers	5,652,316	65,303,756	475.0	$ 7,567	$ 655	$ 0.6359	$ 0.055
SUB-TOTAL RESIDENTIAL	**$11,869,979**	**$16,025,266**	**$ 3,037,972**	**$19,063,238**	**$24,722,211**	**$ 59,505,995**	**2.08**	**3.12**			**44,810,970**	**294,555,356**	**5,558.9**	**$ 2,135**	**$ 325**	**$ 0.2649**	**$ 0.040**
Energy Conscious Blueprint (a)	$ 3,882,818	$ 3,882,818	$ 1,502,953	$ 5,385,771	$15,132,018	$ 19,688,014	3.90	3.66	129	Projects	11,729,327	179,590,966	1,971.6	$ 1,969	$ 129	$ 0.3310	$ 0.022
TOTAL - LOST OPPORTUNITY	**$ 3,882,818**	**$ 3,882,818**	**$ 1,502,953**	**$ 5,385,771**	**$15,132,018**	**$ 19,688,014**	**3.90**	**3.66**			**11,729,327**	**179,590,966**	**1,971.6**	**$ 1,969**	**$ 129**	**$ 0.3310**	**$ 0.022**
Energy Opportunities	$10,702,387	$10,702,387	$22,075,764	$32,778,150	$36,260,274	$ 47,519,162	3.39	1.45	273	Projects	33,593,977	422,633,262	4,658.3	$ 2,298	$ 183	$ 0.3186	$ 0.025
O&M																	
Services (BSC, Training, RetroX)	$ 3,776,044	$ 3,776,044	$ 2,679,182	$ 6,455,226	$ 6,179,844	$ 8,461,087	1.64	1.31	141	Projects	9,072,327	67,026,822	1,365.9	$ 2,764	$ 374	$ 0.4162	$ 0.056
PRIME	$ 402,385	$ 402,385	$ -	$ 323,000	$ 547,102	$ 791,071	1.36	2.45	64	Projects	1,292,000	6,460,000	-	$ -	$ -	$ 0.3114	$ 0.062
TOTAL - C&I LARGE RETROFIT	**$14,880,816**	**$14,880,816**	**$24,754,945**	**$39,556,376**	**$42,987,220**	**$ 56,771,319**	**2.89**	**1.44**			**43,958,304**	**496,120,083**	**6,024.2**	**$ 2,470**	**$ 219**	**$ 0.3385**	**$ 0.030**
Small Business	$ 4,512,339	$ 4,512,339	$ 5,745,466	$10,257,805	$10,695,135	$ 13,887,509	2.37	1.35	400	Projects	9,597,396	121,106,581	1,599.3	$ 2,821	$ 224	$ 0.4702	$ 0.037
SUB-TOTAL C&I	**$23,275,973**	**$23,275,973**	**$32,003,365**	**$55,199,953**	**$68,814,373**	**$ 90,346,842**	**2.96**	**1.64**			**65,285,027**	**796,817,631**	**9,595.1**	**$ 2,426**	**$ 199**	**$ 0.3565**	**$ 0.029**
SmartLiving Center®	$ 481,746	$ 481,746							15,000	Customers							
EE Communities / Behavioral Pilot	$ 300,000	$ 300,000															
Science Center	$ 42,000	$ 42,000															
K-8 Education	$ 401,825	$ 401,825							2,000	Curriculum							
SUB-TOTAL EDUCATION	**$ 1,225,571**	**$ 1,225,571**															
Institute for Sustainable Energy (ECSU)	$ 112,000	$ 112,000															
Residential Loan Program (Includes ECLF)	$ 347,280	$ 347,280															
C&LM Loan Defaults	$ 50,000	$ 50,000															
SUB-TOTAL PROGRAMS/REQUIREMENTS	**$ 509,280**	**$ 509,280**															
ISO Load Response Program Support	$ 1,376,000	$ 1,376,000											34,000.0	$ 40	$ 40		
SUB-TOTAL LOAD MANAGEMENT	**$ 1,376,000**	**$ 1,376,000**											**34,000.0**	**$ 40**	**$ 40**		
Research, Development & Demonstration	$ 225,000	$ 225,000															
SUB-TOTAL RENEWABLES AND RD&D	**$ 225,000**	**$ 225,000**															
Administration	$ 750,000	$ 750,000															
Planning & Evaluation	$ 316,765	$ 316,765															
Evaluation, Outside Services	$ 570,000	$ 570,000															
Information Technology	$ 342,500	$ 342,500															
EEB	$ 350,000	$ 350,000															
2012 Performance Management Fee	$ 2,243,318	$ 2,243,318															
Marketing Plan	$ 250,000	$ 250,000															
SUB-TOTAL ADMIN & PLANNING	**$ 4,822,583**	**$ 4,822,583**															
PROGRAM SUB-TOTALS																	
RESIDENTIAL	**$13,478,081**	**$17,633,368**	**$ 3,037,972**	**$19,063,238**	**$24,722,211**	**$ 59,505,995**	**1.83**	**3.12**			**44,810,970**	**294,555,356**	**5,558.9**	**$ 2,425**	**$ 369**	**$ 0.3008**	**$ 0.046**
COMMERCIAL & INDUSTRIAL	**$24,916,722**	**$24,916,722**	**$32,003,365**	**$55,199,953**	**$68,814,373**	**$ 90,346,842**	**2.76**	**1.64**			**65,285,027**	**796,817,631**	**9,595.1**	**$ 2,597**	**$ 213**	**$ 0.3817**	**$ 0.031**
OTHER*	**$ 4,909,583**	**$ 4,909,583**	$ -	$ -	$ -	$ -							**34,000.0**				
TOTAL C&LM BUDGET Note 2	**$43,304,386**	**$47,459,673**	**$35,041,337**	**$74,263,191**	**$93,536,584**	**$ 149,852,837**	**2.16**	**2.02**			**110,095,997**	**1,091,372,987**	**49,154.1**	**$ 2,767**	**$ 279**	**$ 0.3933**	**$ 0.040**

Notes:
(a) Energy Blueprint includes Motors and Cool Choice
(b) Based on Electric System Cost which excludes funds designated for oil measures.

* Other - Education is primarily allocated to Residential Programs

Totals may vary due to rounding

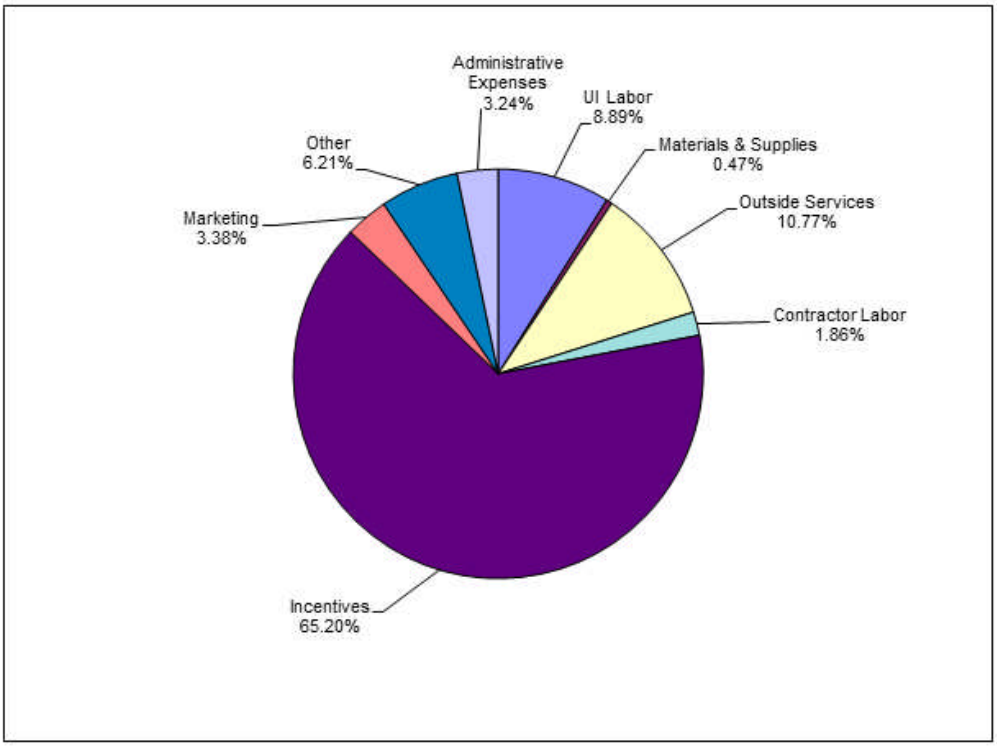
THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
INCREASED SAVINGS
TABLE C

PROGRAM NAME	UI Labor	Materials & Supplies	Outside Services	Contractor Labor	Incentives	Marketing	Other (b)	Administrative Expenses	TOTAL
Residential Retail Products	$ 494,224	$ 13,381	$ 509,200		$ 1,997,246	$ 420,803	$ 5,803	$ 4,647	$ 3,445,304
TOTAL - CONSUMER PRODUCTS	**$ 494,224**	**$ 13,381**	**$ 509,200**	**$ -**	**$ 1,997,246**	**$ 420,803**	**$ 5,803**	**$ 4,647**	**$ 3,445,304**
Residential New Construction	$ 58,166	$ 1,500	$ 7,500	$ -	$ 92,663	$ 15,000	$ -	$ 2,500	$ 177,329
Home Energy Solutions	$ 371,894	$ 4,655	$ 80,401	$ -	$ 6,744,248	$ 150,000	$ -	$ 13,433	$ 7,364,631
HES Income Eligible	$ 489,057	$ 6,200	$ 38,440	$ -	$ 4,242,845	$ 253,400	$ -	$ 8,060	$ 5,038,002
SUB-TOTAL RESIDENTIAL	**$ 1,413,341**	**$ 25,736**	**$ 635,541**	**$ -**	**$ 13,077,002**	**$ 839,203**	**$ 5,803**	**$ 28,640**	**$ 16,025,266**
Energy Conscious Blueprint (a)	$ 537,396	$ 10,000	$ 122,000	$ 100,000	$ 2,835,486	$ 150,000	$ 17,000	$ 110,936	$ 3,882,818
TOTAL - LOST OPPORTUNITY	**$ 537,396**	**$ 10,000**	**$ 122,000**	**$ 100,000**	**$ 2,835,486**	**$ 150,000**	**$ 17,000**	**$ 110,936**	**$ 3,882,818**
Energy Opportunities	$ 538,015	$ 9,700	$ 325,000	$ 500,000	$ 8,648,454	$ 125,000	$ 18,989	$ 537,229	$ 10,702,387
O&M Services (RFP, BSC, Training, RetroX)	$ 75,068	$ 2,922	$ 1,310,344	$ -	$ 2,320,768	$ 41,900	$ 3,540	$ 21,502	$ 3,776,044
PRIME	$ 34,600	$ 500	$ 338,000	$ 12,000	$ -	$ 10,000	$ 785	$ 6,500	$ 402,385
TOTAL - C&I LARGE RETROFIT	**$ 647,683**	**$ 13,122**	**$ 1,973,344**	**$ 512,000**	**$ 10,969,222**	**$ 176,900**	**$ 23,314**	**$ 565,231**	**$ 14,880,816**
Small Business	$ 300,000	$ 9,630	$ 110,000	$ 100,000	$ 3,107,835	$ 82,000	$ 2,500	$ 800,374	$ 4,512,339
SUB-TOTAL C&I	**$ 1,485,079**	**$ 32,752**	**$ 2,205,344**	**$ 712,000**	**$ 16,912,543**	**$ 408,900**	**$ 42,814**	**$ 1,476,541**	**$ 23,275,973**
SmartLiving Center®	$ 65,395	$ 6,521	$ 27,000	$ 171,814	$ -	$ 35,000	$ 174,016	$ 2,000	$ 481,746
EE Communities / Behavioral Pilot	$ 28,297	$ 6,000	$ 253,703	$ -	$ -	$ 12,000	$ -	$ -	$ 300,000
Science Center	$ -	$ -	$ 42,000	$ -	$ -	$ -	$ -	$ -	$ 42,000
K-8 Education	$ 65,395	$ 8,521	$ 197,698	$ -	$ 75,000	$ 47,411	$ -	$ 7,800	$ 401,825
SUB-TOTAL EDUCATION	**$ 159,087**	**$ 21,042**	**$ 520,401**	**$ 171,814**	**$ 75,000**	**$ 94,411**	**$ 174,016**	**$ 9,800**	**$ 1,225,571**
Institute for Sustainable Energy (ECSU)	$ -	$ -	$ -	$ -	$ -	$ -	$ 112,000	$ -	$ 112,000
Residential Loan Program (Includes ECLF)	$ 30,045	$ -	$ -	$ -	$ -	$ -	$ 317,235	$ -	$ 347,280
C&LM Loan Defaults	$ -	$ -	$ -	$ -	$ -	$ -	$ 50,000	$ -	$ 50,000
SUB-TOTAL PROGRAMS/REQUIREMENTS	**$ 30,045**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 479,235**	**$ -**	**$ 509,280**
ISO Load Response Program	$ 125,000	$ 5,000	$ 351,000	$ -	$ 878,000	$ 10,000	$ -	$ 7,000	$ 1,376,000
SUB-TOTAL LOAD MANAGEMENT	**$ 125,000**	**$ 5,000**	**$ 351,000**	**$ -**	**$ 878,000**	**$ 10,000**	**$ -**	**$ 7,000**	**$ 1,376,000**
Research, Development & Demonstration	$ -	$ -	$ 225,000	$ -	$ -	$ -	$ -	$ -	$ 225,000
SUB-TOTAL RENEWABLES AND RD&D	**$ -**	**$ -**	**$ 225,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 225,000**
Administration	$ 643,268	$ 2,500	$ 98,532	$ -	$ -	$ -	$ -	$ 5,700	$ 750,001
Planning & Evaluation	$ 311,348	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,417	$ 316,765
Evaluation, Outside Services	$ -	$ -	$ 570,000	$ -	$ -	$ -	$ -	$ -	$ 570,000
Information Technology	$ 49,983	$ 134,531	$ 155,386	$ -	$ -	$ -	$ -	$ 2,600	$ 342,500
EEB	$ -	$ -	$ 350,000	$ -	$ -	$ -	$ -	$ -	$ 350,000
Marketing Plan	$ -	$ -	$ -	$ -	$ -	$ 250,000	$ -	$ -	$ 250,000
2012 Performance Management Fee	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,243,318	$ -	$ 2,243,318
SUB-TOTAL ADMIN & PLANNING	**$ 1,004,599**	**$ 137,031**	**$ 1,173,918**	**$ -**	**$ -**	**$ 250,000**	**$ 2,243,318**	**$ 13,717**	**$ 4,822,584**
PROGRAM SUB-TOTALS									
RESIDENTIAL	$ 1,583,735	$ 44,274	$ 1,091,402	$ 137,451	$ 13,152,002	$ 1,124,214	$ 462,251	$ 38,040	$ 17,633,368
COMMERCIAL & INDUSTRIAL	$ 1,628,818	$ 40,257	$ 2,620,885	$ 746,363	$ 17,790,543	$ 478,300	$ 127,617	$ 1,483,941	$ 24,916,722
OTHER	$ 1,004,599	$ 137,031	$ 1,398,918	$ -	$ -	$ -	$ 2,355,318	$ 13,717	$ 4,909,584
TOTAL C&LM BUDGET	**$ 4,217,151**	**$ 221,561**	**$ 5,111,204**	**$ 883,814**	**$ 30,942,544**	**$ 1,602,514**	**$ 2,945,186**	**$ 1,535,698**	**$ 47,459,674**

Notes:
(a) Energy Blueprint includes Motors and Cool Choice
(b) Other expenses include:
- Performance Management Fee
- Smart Living Center Lease
- Smart Living Center Utilities
- ECSU
- Energy Conservation Loan Fund
- Neighborhood Housing Services
- C&LM Loan Defaults
- NEEP Participation
- Dues
- Postage
- Telephone Expense

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY
2012 CONSERVATION & LOAD MANAGEMENT
INCREASED SAVINGS
C&LM BUDGET BY EXPENSE CLASS



Expense Classes		Budget	% of Budget
UI Labor	$	4,217,151	8.89%
Materials & Supplies	$	221,561	0.47%
Outside Services	$	5,111,204	10.77%
Contractor Labor	$	883,814	1.86%
Incentives	$	30,942,544	65.20%
Marketing	$	1,602,514	3.38%
Other	$	2,945,186	6.21%
Administrative Expenses	$	1,535,698	3.24%
Total	$	47,459,673	100.00%

Totals may vary due to rounding

THE UNITED ILLUMINATING COMPANY

2012 Management Incentive Performance Indicators and Incentive Matrix

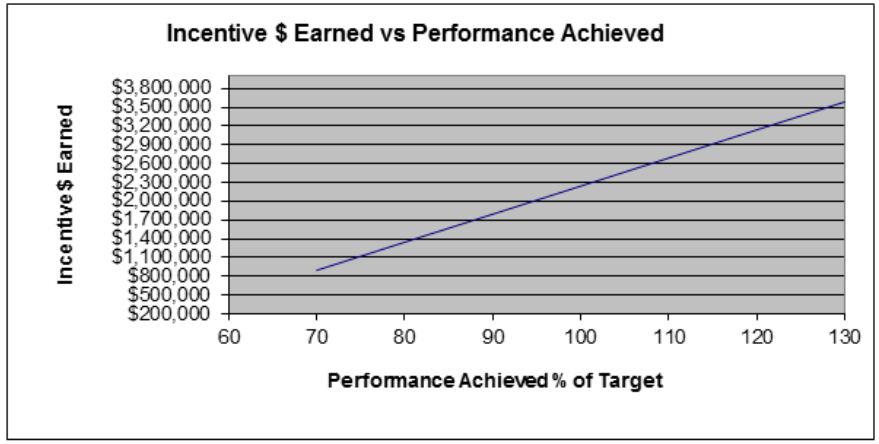
Increased Savings

Provided below is the 2012 Incentive Matrix with Performance Indicators.
The weights applied to each of the individual and sector level metrics were developed in collaboration with ECMB consultants. The Utility Performance Incentive is $2,243,318 .
This calculated is based on achieving 100% of all performance targets and earning a target incentive of 5% of C&LM budgets (not including ECMB costs, Audit Costs or Management Incentive).
Goals will be prorated based on actual over/under spend of budget.
The actual incentive earned will be determined by the performance achieved in each of the Incentive Metrics identified below, based on the following Performance Index:

Performance %	Pretax Incentive	Pre-tax Incentive
70	2%	$897,327
80	3%	$1,345,991
90	4%	$1,794,654
100	5%	$2,243,318
110	6%	$2,691,981
120	7%	$3,140,645
130	8%	$3,589,308

Total Original Budget* $44,866,355

*Does not include Incentive, ECMB costs and Audit



SECTOR Program		Performance Indicators		Incentive Metrics			
				Incentive Metric	Target Goal	Weight	Incentive
RESIDENTIAL							
All Residential Programs (Sector Level) Sector Budget	$ 16,025,266	Residential Products & Services Lifetime kWh	142,177,199	Total Electric System Benefit from all Res programs	Electric System Benefit from all Res programs Total Electric System Benefit: $24,722,211	0.165	$370,147
		Residential Products & Services kW	2,757				
		Homes Lifetime kWh	2,941,285				
		Homes kW	103				
		Home Energy Solutions Lifetime kWh	84,133,117				
		Home Energy Solutions kW	2,224				
		HES Income Eligible Lifetime kWh	65,303,756				
		HES Income Eligible kW	475				
		Total Residential Lifetime kWh	294,555,356				
		Total Residential kW	5,559				
		Present Value of Res Lifetime kWh	$0.0701				
		Present Value of Res Lifetime kW @ Customer Meter	$731.29				
		Total Res Lifetime kWh @ Present Value Factor	$20,657,048				
		Total Res kW @ Present Value Factor	$4,065,163				
		Total Electric System Benefit	$24,722,211				
		The Net Electric System Benefit from all Res programs	$8,696,945				
All Residential Programs (Sector Level)		Total Net Electric System Benefit	$8,696,945		$8,696,945	0.165	$370,147
Residential New Construction	$ 177,329			Energy savings included in appropriate sector level metric			
HES	$ 7,364,631	Increase average HES Participant savings by 20% for all fuels		Energy savings included in appropriate sector level metric Increase average HES savings by 20%	Achieve 20% average increase in HES per participant savings across all fuels	0.08	$179,465
		For 10% of HES participants achieve 25% overall reduction in total energy savings; based on the average energy usage of HES participants		Achieve deep savings of 25%	Achieve minimum savings of 25% across all fuels in 10% of HES participants	0.04	$89,733
HES - Income Eligible	$ 5,038,002	Fully expend 2012 HES-IE Budget. This is a penalty metric. Companies must expend at least 88% of budget to avoid penalty. Above 88% the penalty is scaled with a 10% reduction in the penalty for each one percent increase in budget spent above 88%; Expending 98% will avoid the penalty. The budget will be adjusted and pro-rated based on final year-end spending, net of ARRA impacts. The EEB acknowledges the high priority for the spending of any remaining ARRA federal stimulus monies through March 2012 and the important support and resources the Companies are dedicating to that effort. Any under-expended HES-IE funding from 2012 will be carry forward to 2013, which would be in addition to the parity-level of HES-IE funding in 2013.		Energy savings included in appropriate sector level metric Fully expend 2012 HES-IE Budget	Note: the penalty below 88% is -.05		
		Alignment of HES and HES-IE BPI Certfications. One person in each crew with both BPI Building Analyst 1 and Envelop Specialist certifications by 6/30/12. By 9/30/12 each crew will have received training and be able to provide duct sealing services as per HES guidelines. Each crew will have the necessary testing and diagnostic equipment to perform duct sealing.		HES-IE Crew member certifications and Duct Sealing Training	1 member of each crew certified by June 30, 2012. Duct Sealing Training and able/equipped by 9/30/12	0.03	$67,300
Retail Products	$ 3,445,304			Energy savings included in appropriate sector level metric			
EE Communities	$ 300,000	HES Coordination with community tasks forces and vendors to bring in more HES Projects (projects completed from outside of the utilities)		Increase customer participation			
All Other Residential Programs		Electric savings		Energy savings included in appropriate sector level metric			

SECTOR Program		Performance Indicators		Incentive Metrics Incentive Metric	Target Goal	Weight	Incentive
COMMERCIAL & INDUSTRIAL (C/I)							
All C/I Programs (Sector Level) Sector Budget	$ 14,880,816	Energy Blueprint Lifetime kWh Energy Blueprint kW Energy Opportunities Lifetime kWh Energy Opportunities kW O&M (RetroCx, BOC, RFP) O&M RFP kW Small Business Lifetime kWh Small Business kW Total C&I Lifetime kWh Total C&I kW Present Value of C&I Lifetime kWh Present Value of C&I Lifetime kW @ Customer Meter Total C&I Lifetime kWh @ Present Value Factor Total C&I kW @ Present Value Factor Total Electric System Benefit The net Electric System Benefit from all C&I programs:	179,590,966 1,972 422,633,262 4,658 73,486,822 1,366 121,106,581 1,599 796,817,631 9,595 $0.0745 $985.70 $59,356,479 $9,457,895 $68,814,373 $53,933,557	Total Electric System Benefit from all C&I programs.	Electric System Benefit from all C&I programs Total Electric System Benefit: $68,814,373	0.21	$471,097
All C/I Programs (Sector Level) Sector Budget		Total Net Electric System Benefit from all C&I programs.	$53,933,557		Total Electric System Benefit from all C&I	0.21	$471,097
Small Business	$ 4,512,339	Electric Savings LT kWh: 121,106,581 Demand Savings kW: 1,599.3 1) Number of projects participating in the Comprehensive Initiative based on the agreed definition of comprehensiveness.		Energy savings included in appropriate sector level metric	**15%** signed projects will be Comprehensive projects	0.02	$44,866
Energy Conscious Blueprint	$ 3,882,818	1) Number of new construction/major renovation projects that exceed the new construction State Energy Code baseline by 30% or follow the whole building performance track. 2) The Companies will develop a plan to transition into IECC 2012 (ASHRAE 2010) in collaboration with the EEB: a) Awareness: Prepare the market by working with the A/E community; the trade communities; specifiers and inspectors, b) Develop and deliver a series of code training sessions for the A/E and trade communities, c) Develop and deliver a series of training sessions variety of subjects relating to Integrated Design and High Performance Buildings (including Net Zero buildings) and code issues.		Plan completion for the end of 2nd Qtr. Produce awareness collateral Conduct joint training sessions with CL&P Conduct joint training sessions with CL&P	**40%** of the signed projects	0.02	$44,866
Energy Opportunities	$ 10,702,387	1) Number of projects participating in the Comprehensive Initiative based on the agreed definition of comprehensiveness. 2) Number of signed projects that incorporate performance contracting (and/or 3rd Party Financing, including utility capital).			**15%** signed projects will be Comprehensive projects **10%** signed project that incorporates performance contracting (and/or 3rd Party Financing, including utility capital)	0.02 0.02	$44,866 $44,866
Business & Energy Sustainability (formerlyO&M RFP) Includes funds for programs that may result from the public input	$ 4,178,429	1) The Companies will develop and promote a Sustainable Energy Management Plan and Guide which includes benchmarking, the use of dashboards, and an implementation plan including Retro-commissioning in collaboration with the EEB.			Develop the Sustainable Energy Management Guide and enroll **20** customers.	0.02	$44,866
C&I Market Segmentation		The Companies will develop a plan which includes a protocol for defining market segmentaiton and market penetration for the purposes of establishing long term goals in collaboration with the EEB (EO and SBEA).		Develop goals for inclusion for the 2013 plan			
All Other C&I Programs		Electric Savings		Electric Savings include in appropriate sector level metric			
Non-Electric Benefits		Dollar savings associated with fossil fuel savings, water savings, maintenance savings, labor savings and any other identified benefit	$1,500,000 in benefits				
Total Incentive $ Residential and C&I						1.0000	$2,243,318

Table A1
YGS, CNG & SCG
Proposed Natural Gas Conservation Plan Budget - 2012 Base & 2012 Increased Savings

	2012 - Base Proposed				2012 - Increased Savings			
Natural Gas C&LM Budget	2012 Yankee Proposed Budget	2012 CNG Proposed Budget	2012 SCG Proposed Budget	2012 Combined YGS/CNG/SCG Total	2012 Yankee Increased Savings	2012 CNG Increased Savings	2012 SCG Increased Savings	2012 Combined YGS/CNG/SCG Total
RESIDENTIAL								
HES Income Eligible - Weatherization	$ 1,170,000	$ 1,000,000	$ 1,100,000	$ 3,270,000	$ 2,181,500	$ 2,078,744	$ 2,317,498	$ 6,577,742
HES Income Eligible - Audits	$ 30,000	$ 25,772	$ 25,803	$ 81,575	$ 35,000	$ 25,772	$ 25,803	$ 86,575
HES Income Eligible - Total	**$ 1,200,000**	**$ 1,025,772**	**$ 1,125,803**	**$ 3,351,575**	**$ 2,216,500**	**$ 2,104,516**	**$ 2,343,301**	**$ 6,664,317**
Home Energy Solutions (HES)	$ 1,904,000	$ 1,815,345	$ 1,824,790	$ 5,544,135	$ 3,101,859	$ 2,852,249	$ 3,093,661	$ 9,047,769
Residential New Construction	$ 500,000	$ 350,000	$ 300,000	$ 1,150,000	$ 600,000	$ 350,000	$ 300,000	$ 1,250,000
Water Heating	$ 70,000	$ 40,055	$ 46,210	$ 156,265	$ 70,000	$ 40,055	$ 46,211	$ 156,266
Subtotal Residential	**$ 3,674,000**	**$ 3,231,172**	**$ 3,296,803**	**$ 10,201,975**	**$ 5,988,359**	**$ 5,346,820**	**$ 5,783,173**	**$ 17,118,352**
COMMERCIAL & INDUSTRIAL								
C&I LOST OPPORTUNITY								
Energy Conscious Blueprint	$ 1,480,000	$ 1,240,000	$ 1,150,000	$ 3,870,000	$ 3,136,612	$ 2,362,464	$ 2,080,462	$ 7,579,538
Total - Lost Opportunity	**$ 1,480,000**	**$ 1,240,000**	**$ 1,150,000**	**$ 3,870,000**	**$ 3,136,612**	**$ 2,362,464**	**$ 2,080,462**	**$ 7,579,538**
C&I LARGE RETROFIT								
Energy Opportunities	$ 1,020,000	$ 860,000	$ 800,000	$ 2,680,000	$ 2,474,834	$ 1,735,328	$ 1,457,286	$ 5,667,448
O&M (RetroCx, Training)	$ 200,000	$ 100,000	$ 100,000	$ 400,000	$ 324,548	$ 190,515	$ 184,050	$ 699,113
Total - C&I Large Retrofit	**$ 1,220,000**	**$ 960,000**	**$ 900,000**	**$ 3,080,000**	**$ 2,799,382**	**$ 1,925,843**	**$ 1,641,336**	**$ 6,366,561**
Small Business	$ 100,000	$ 100,000	$ 100,000	$ 300,000	$ 246,081	$ 192,444	$ 187,763	$ 626,288
Subtotal C&I	**$ 2,800,000**	**$ 2,300,000**	**$ 2,150,000**	**$ 7,250,000**	**$ 6,182,075**	**$ 4,480,751**	**$ 3,909,561**	**$ 14,572,387**
OTHER - PROGRAMS/REQUIREMENTS								
CHIF Loan Fund	$ 50,000	$ 50,000	$ 50,000	$ 150,000	$ 75,000	$ 75,000	$ 75,000	$ 225,000
Residential Financing Subsidies	$ 90,000	$ 90,000	$ 90,000	$ 270,000	$ 135,000	$ 135,000	$ 135,000	$ 405,000
C&I Financing Subsidies	$ 50,000	$ 50,000	$ 50,000	$ 150,000	$ 75,000	$ 75,000	$ 75,000	$ 225,000
Subtotal Programs/Requirements	**$ 190,000**	**$ 190,000**	**$ 190,000**	**$ 570,000**	**$ 285,000**	**$ 285,000**	**$ 285,000**	**$ 855,000**
OTHER - ADMINISTRATIVE & PLANNING								
Information Technology	$ 35,000	$ 30,000	$ 30,000	$ 95,000	$ 52,500	$ 45,000	$ 45,000	$ 142,500
Planning	$ 59,000	$ 51,000	$ 51,000	$ 161,000	$ 88,500	$ 76,500	$ 76,500	$ 241,500
Evaluation	$ 284,000	$ 258,000	$ 258,000	$ 800,000	$ 426,000	$ 387,000	$ 387,000	$ 1,200,000
Energy Efficiency Board	$ 16,500	$ 16,500	$ 16,500	$ 49,500	$ 24,750	$ 24,750	$ 24,750	$ 74,250
Subtotal Other - Administrative & Planning	**$ 394,500**	**$ 355,500**	**$ 355,500**	**$ 1,105,500**	**$ 591,750**	**$ 533,250**	**$ 533,250**	**$ 1,658,250**
PROGRAM SUBTOTALS								
Residential	$ 3,814,000	$ 3,371,172	$ 3,436,803	$ 10,621,975	$ 6,198,359	$ 5,556,820	$ 5,993,173	$ 17,748,352
C&I	$ 2,850,000	$ 2,350,000	$ 2,200,000	$ 7,400,000	$ 6,257,075	$ 4,555,751	$ 3,984,561	$ 14,797,387
Other	$ 394,500	$ 355,500	$ 355,500	$ 1,105,500	$ 591,750	$ 533,250	$ 533,250	$ 1,658,250
TOTAL	**$ 7,058,500**	**$ 6,076,672**	**$ 5,992,303**	**$ 19,127,475**	**$ 13,047,184**	**$ 10,645,821**	**$ 10,510,984**	**$ 34,203,989**

Table B
2012 COMPARISON OF CONSERVATION PROGRAMS
2012 INCREASED SAVINGS

Program	2012 Budget	Customer Cost 2012	Total Resource Cost 2012	Gas Benefit	Total Resource Benefit	% of 2012 Budget	Gas System B/C Ratio	Total Resource B/C Ratio	Goals/ # Units	Units of Measure	Annualized Savings (ccf)	Lifetime Savings (ccf)	Peak Day Savings (ccF)	Annual Cost Rate ($/ccf)	Lifetime Cost Rate ($/ccf)
RESIDENTIAL															
YGS HES Income Eligible	$ 2,216,500	$ -	$ 2,216,500	$ 2,996,924	$ 3,014,522	17.0%	1.35	1.36	3,270	Homes	315,965	5,920,875	2,805	$ 7.02	$ 0.37
CNG HES Income Eligible	$ 2,104,516	$ 0	$ 2,104,516	$ 2,475,314	$ 2,798,561	19.8%	1.18	1.33	3,914	Homes	266,478	4,774,788	1,776	$ 7.90	$ 0.44
SCG HES Income Eligible	$ 2,343,301	$ (0)	$ 2,343,301	$ 2,795,281	$ 3,160,312	22.3%	1.19	1.35	4,420	Homes	300,924	5,391,993	2,006	$ 7.79	$ 0.43
Sub Total HES Income Eligible	**$ 6,664,317**	**$ 0**	**$ 6,664,317**	**$ 8,267,520**	**$ 8,973,395**	**19.5%**	**1.24**	**1.35**	**11,605**	**Homes**	**883,368**	**16,087,656**	**6,586**	**$ 7.54**	**$ 0.41**
YGS Home Energy Solutions	$ 3,101,859	$ 413,419	$ 3,515,278	$ 4,579,972	$ 4,620,483	23.8%	1.48	1.31	4,682	Homes & HVAC Rebated	490,733	8,975,876	4,210	$ 6.32	$ 0.35
CNG Home Energy Solutions	$ 2,852,249	$ 293,971	$ 3,146,220	$ 4,344,409	$ 4,623,577	26.8%	1.52	1.47	3,681	Homes & HVAC Rebated	432,956	8,545,673	3,907	$ 6.59	$ 0.33
SCG Home Energy Solutions	$ 3,093,661	$ 295,707	$ 3,389,368	$ 4,372,266	$ 4,647,990	29.4%	1.41	1.37	3,705	Homes & HVAC Rebated	435,731	8,600,512	3,932	$ 7.10	$ 0.36
Sub Total Home Energy Solutions	**$ 9,047,769**	**$ 1,003,097**	**$ 10,050,866**	**$ 13,296,647**	**$ 13,892,049**	**26.5%**	**1.47**	**1.38**	**12,067**	**Homes**	**1,359,419**	**26,122,060**	**12,050**	**$ 6.66**	**$ 0.35**
YGS New Construction	$ 600,000	$ 106,355	$ 706,355	$ 580,019	$ 580,019	4.6%	0.97	0.82	250	Homes	49,085	1,227,134	417	$ 12.22	$ 0.49
CNG New Construction	$ 350,000	$ 303,501	$ 653,501	$ 354,593	$ 354,593	3.3%	1.01	0.54	107	Homes	29,480	736,990	282	$ 11.87	$ 0.47
SCG New Construction	$ 300,000	$ 255,281	$ 555,281	$ 298,256	$ 298,256	2.9%	0.99	0.54	90	Homes	24,796	619,898	237	$ 12.10	$ 0.48
Sub Total New Construction	**$ 1,250,000**	**$ 665,138**	**$ 1,915,138**	**$ 1,232,867**	**$ 1,232,867**	**3.7%**	**0.99**	**0.64**	**447**	**Homes**	**103,361**	**2,584,022**	**936**	**$ 12.09**	**$ 0.48**
YGS Water Heating	$ 70,000	$ 170,752	$ 240,752	$ 152,765	$ 152,765	0.5%	2.18	0.63	569	Units	24,361	292,328	78	$ 2.87	$ 0.24
CNG Water Heating	$ 40,055	$ 71,400	$ 111,455	$ 65,790	$ 65,790	0.4%	1.64	0.59	238	Units	10,186	122,237	33	$ 3.93	$ 0.33
SCG Water Heating	$ 46,211	$ 85,800	$ 132,011	$ 79,058	$ 79,058	0.4%	1.71	0.60	286	Units	12,241	146,890	39	$ 3.78	$ 0.31
Sub Total Water Heating	**$ 156,266**	**$ 327,952**	**$ 484,218**	**$ 297,613**	**$ 297,613**	**0.5%**	**1.90**	**0.61**	**1,093**	**Units**	**46,788**	**561,454**	**150**	**$ 3.34**	**$ 0.28**
Subtotal Residential	**$ 17,118,352**	**$ 1,996,187**	**$ 19,114,539**	**$ 23,094,647**	**$ 24,395,924**	**50.0%**	**1.35**	**1.28**	**25,212**	**Homes/Units**	**2,392,936**	**45,355,193**	**19,723**	**$ 7.15**	**$ 0.38**
Commercial and Industrial C&I Lost Opportunity															
YGS Energy Conscious Blueprint	$ 3,136,612	$ 850,725	$ 3,987,337	$ 5,349,942	$ 5,349,942	24.0%	1.71	1.34	175	Projects	672,820	10,190,977	5,198	$ 4.66	$ 0.31
CNG Energy Conscious Blueprint	$ 2,362,464	$ 667,351	$ 3,029,815	$ 3,901,163	$ 3,901,163	22.2%	1.65	1.29	127	Projects	490,095	7,423,296	3,786	$ 4.82	$ 0.32
SCG Energy Conscious Blueprint	$ 2,080,462	$ 584,769	$ 2,665,231	$ 3,418,404	$ 3,418,404	19.8%	1.64	1.28	111	Projects	429,447	6,504,683	3,318	$ 4.84	$ 0.32
Sub Total Lost Opportunity	**$ 7,579,538**	**$ 2,102,844**	**$ 9,682,382**	**$ 12,669,509**	**$ 12,669,509**	**22.2%**	**1.67**	**1.31**	**413**	**Projects**	**1,592,362**	**24,118,956**	**12,302**	**$ 4.76**	**$ 0.31**
Commercial and Industrial Large Retrofit															
YGS Energy Opportunities	$ 2,474,834	$ 3,490,838	$ 5,965,672	$ 5,695,315	$ 5,695,315	19.0%	2.30	0.95	154	Projects	888,623	10,221,524	13,377	$ 2.79	$ 0.24
CNG Energy Opportunities	$ 1,735,328	$ 2,412,508	$ 4,147,836	$ 3,883,167	$ 3,883,167	16.3%	2.24	0.94	105	Projects	605,384	6,963,525	9,113	$ 2.87	$ 0.25
SCG Energy Opportunities	$ 1,457,286	$ 2,132,929	$ 3,590,215	$ 3,433,157	$ 3,433,157	13.9%	2.36	0.96	93	Projects	535,228	6,156,541	8,057	$ 2.72	$ 0.24
Sub Total Energy Opportunites	**$ 5,667,448**	**$ 8,036,274**	**$ 13,703,722**	**$ 13,011,639**	**$ 13,011,639**	**16.6%**	**2.30**	**0.95**	**352**	**Projects**	**2,029,234**	**23,341,591**	**30,547**	**$ 2.79**	**$ 0.24**
YGS O&M	$ 324,548	$ 182,538	$ 507,086	$ 857,446	$ 857,446	2.5%	2.64	1.69	9	Projects	143,392	1,433,932	1,749	$ 2.26	$ 0.23
CNG O&M	$ 190,515	$ 176,659	$ 367,174	$ 466,498	$ 466,498	1.8%	2.45	1.27	5	Projects	77,955	779,557	951	$ 2.44	$ 0.24
SCG O&M	$ 184,050	$ 175,460	$ 359,510	$ 463,331	$ 463,331	1.8%	2.52	1.29	5	Projects	77,426	774,264	945	$ 2.38	$ 0.24
Sub Total O&M	**$ 699,113**	**$ 534,658**	**$ 1,233,771**	**$ 1,787,275**	**$ 1,787,275**	**2.0%**	**2.56**	**1.45**	**19**	**Projects**	**298,772**	**2,987,753**	**3,645**	**$ 2.34**	**$ 0.23**
YGS Small Business	$ 246,081	$ 124,497	$ 370,578	$ 505,760	$ 505,760	1.9%	2.06	1.36	27	Projects	78,912	907,700	1,188	$ 3.12	$ 0.27
CNG Small Business	$ 192,444	$ 265,434	$ 457,878	$ 427,241	$ 427,241	1.8%	2.22	0.93	23	Projects	66,607	766,154	1,003	$ 2.89	$ 0.25
SCG Small Business	$ 187,763	$ 254,247	$ 442,010	$ 409,236	$ 409,236	1.8%	2.18	0.93	22	Projects	63,800	733,867	960	$ 2.94	$ 0.26
Sub Total Small Business	**$ 626,288**	**$ 644,178**	**$ 1,270,466**	**$ 1,342,238**	**$ 1,342,238**	**1.8%**	**2.14**	**1.06**	**73**	**Projects**	**209,319**	**2,407,721**	**3,151**	**$ 2.99**	**$ 0.26**
Subtotal Commercial & Industrial	**$ 14,572,387**	**$ 11,317,954**	**$ 25,890,341**	**$ 28,810,661**	**$ 28,810,661**	**42.6%**	**1.98**	**1.11**	**856**	**Projects**	**4,129,687**	**52,856,021**	**49,645**	**$ 3.53**	**$ 0.28**
OTHER															
YGS CHIF, Residential, C&I Loan Program	$ 285,000		$ 285,000			2.2%									
CNG CHIF, Residential, C&I Loan Program	$ 285,000		$ 285,000			2.7%									
SCG CHIF, Residential, C&I Loan Program	$ 285,000		$ 285,000			2.7%									
Sub Total Other - Loan Program	**$ 855,000**		**$ 855,000**			2.5%									
YGS IT, Planning, Evaluation, and EEB	$ 591,750		$ 591,750			4.5%									
CNG IT, Planning, Evaluation, and EEB	$ 533,250		$ 533,250			5.0%									
SCG IT, Planning, Evaluation, and EEB	$ 533,250		$ 533,250			5.1%									
Sub Total Other - Evaluation	**$ 1,658,250**		**$ 1,658,250**			4.8%									
Subtotal Other	**$ 2,513,250**	**$ -**	**$ 2,513,250**	**$ -**	**$ -**	**7.3%**	**-**	**-**							
PROGRAM SUBTOTALS															
YGS Residential	$ 5,988,359	$ 690,526	$ 6,678,885	$ 8,309,681	$ 8,367,789	45.9%					880,145	16,416,213	7,510	$ 6.80	$ 0.36
CNG Residential	$ 5,346,820	$ 668,873	$ 6,015,693	$ 7,240,105	$ 7,842,520	50.2%					739,100	14,179,688	5,998	$ 7.23	$ 0.38
SCG Residential	$ 5,783,173	$ 636,789	$ 6,419,962	$ 7,544,861	$ 8,185,616	55.0%					773,691	14,759,292	6,215	$ 7.47	$ 0.39
Residential Total	**$ 17,118,352**	**$ 1,996,187**	**$ 19,114,539**	**$ 23,094,647**	**$ 24,395,924**	**50.0%**					**2,392,936**	**45,355,193**	**19,723**	**$ 7.15**	**$ 0.38**
YGS C&I	$ 6,182,075	$ 4,648,597	$ 10,830,672	$ 12,408,463	$ 12,408,463	47.4%					1,783,747	22,754,135	21,512	$ 3.47	$ 0.27
CNG C&I	$ 4,480,751	$ 3,521,952	$ 8,002,703	$ 8,678,069	$ 8,678,069	42.1%					1,240,040	15,932,532	14,853	$ 3.61	$ 0.28
SCG C&I	$ 3,909,561	$ 3,147,405	$ 7,056,966	$ 7,724,129	$ 7,724,129	37.2%					1,105,900	14,169,355	13,280	$ 3.54	$ 0.28
C&I Total	**$ 14,572,387**	**$ 11,317,954**	**$ 25,890,341**	**$ 28,810,661**	**$ 28,810,661**	**42.6%**					**4,129,687**	**52,856,021**	**49,645**	**$ 3.53**	**$ 0.28**
YGS Other	$ 876,750	$ -	$ 876,750	$ -	$ -	6.7%					-	-	-		
CNG Other	$ 818,250	$ -	$ 818,250	$ -	$ -	7.7%					-	-	-		
SCG Other	$ 818,250	$ -	$ 818,250	$ -	$ -	7.8%					-	-	-		
Other Total	**$ 2,513,250**	**$ -**	**$ 2,513,250**	**$ -**	**$ -**	**7.3%**					-	-	-		
YGS TOTAL	$ 13,047,184	$ 5,339,124	$ 18,386,307	$ 20,718,144	$ 20,776,252	38.1%					2,663,891	39,170,347	29,022	$ 4.90	$ 0.33
CNG TOTAL	$ 10,645,821	$ 4,190,825	$ 14,836,646	$ 15,918,174	$ 16,520,589	31.1%					1,979,140	30,112,220	20,852	$ 5.38	$ 0.35
SCG TOTAL	$ 10,510,984	$ 3,784,193	$ 14,295,177	$ 15,268,990	$ 15,909,744	30.7%					1,879,591	28,928,647	19,495	$ 5.59	$ 0.36
GRAND TOTAL	**$ 34,203,989**	**$ 13,314,141**	**$ 47,518,130**	**$ 51,905,307**	**$ 53,206,585**	**100.0%**	**1.52**	**1.12**			**6,522,622**	**98,211,214**	**69,368**	**$ 5.24**	**$ 0.35**

Table C
YGS 2012 Budget Details
INCREASED SAVINGS

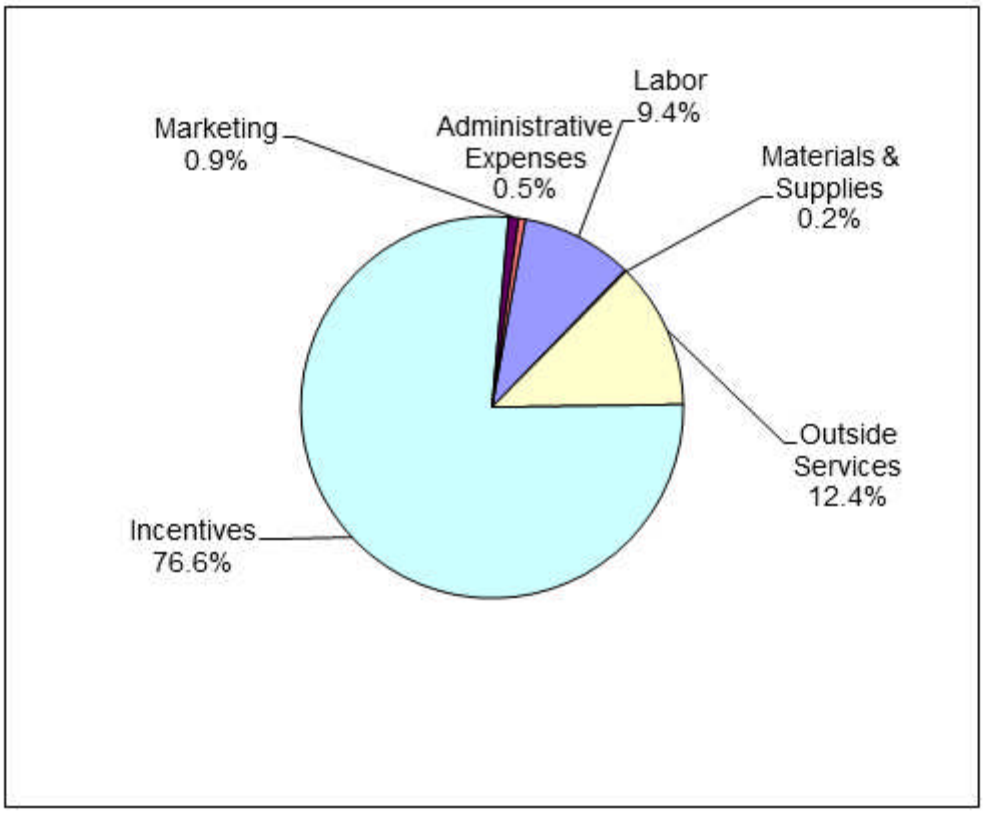
GAS CONSERVATION BUDGET ($000)	Labor	Materials & Supplies	Outside Services	Incentives	Marketing	Administrative Expenses	TOTAL
RESIDENTIAL							
HES Income Eligible - Weatherization	$ 175,500	$ 3,500	$ 180,000	$ 1,800,000	$ 20,000	$ 2,500	$ 2,181,500
HES Income Eligible - Audits			$ 35,000				$ 35,000
HES Income Eligible Total	**$ 175,500**	**$ 3,500**	**$ 215,000**	**$ 1,800,000**	**$ 20,000**	**$ 2,500**	**$ 2,216,500**
Home Energy Solutions (HES)	$ 300,000	$ 5,000	$ 156,874	$ 2,611,825	$ 20,000	$ 8,160	$ 3,101,859
Residential New Construction	$ 34,580	$ 1,625	$ 55,000	$ 493,295	$ 11,500	$ 4,000	$ 600,000
Water Heating	$ 3,500	$ 256	$ 4,100	$ 56,917	$ 4,207	$ 1,020	$ 70,000
Subtotal Residential	**$ 513,580**	**$ 10,381**	**$ 430,974**	**$ 4,962,037**	**$ 55,707**	**$ 15,680**	**$ 5,988,359**
COMMERCIAL & INDUSTRIAL LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 285,000	$ 6,500	$ 200,000	$ 2,617,612	$ 12,500	$ 15,000	$ 3,136,612
Subtotal C&I - Lost Opportunity	**$ 285,000**	**$ 6,500**	**$ 200,000**	**$ 2,617,612**	**$ 12,500**	**$ 15,000**	**$ 3,136,612**
COMMERCIAL & INDUSTRIAL LARGE RETROFIT							
Energy Opportunities	$ 220,084	$ 1,200	$ 200,000	$ 2,016,050	$ 30,000	$ 7,500	$ 2,474,834
Operations & Maintenance	$ 75,170	$ 1,500	$ 15,000	$ 220,378	$ 5,000	$ 7,500	$ 324,548
Subtotal C&I - Retrofit	**$ 295,254**	**$ 2,700**	**$ 215,000**	**$ 2,236,428**	**$ 35,000**	**$ 15,000**	**$ 2,799,382**
Small Business	$ 25,000	$ 1,250	$ 5,800	$ 179,031	$ 10,000	$ 25,000	$ 246,081
Subtotal C&I	**$ 605,254**	**$ 10,450**	**$ 420,800**	**$ 5,033,071**	**$ 57,500**	**$ 55,000**	**$ 6,182,075**
OTHER - PROGRAMS/REQUIREMENTS & PLANNING							
CHIF Loan Fund			$ 75,000				$ 75,000
Residential Financing Subsidies			$ 135,000				$ 135,000
C&I Financing Subsidies			$ 75,000				$ 75,000
Information Technology			$ 52,500				$ 52,500
Planning	$ 88,500		$ -				$ 88,500
Evaluation	$ 25,270		$ 400,730				$ 426,000
Energy Efficiency Board			$ 24,750				$ 24,750
Subtotal Other	**$ 113,770**	**$ -**	**$ 762,980**	**$ -**	**$ -**	**$ -**	**$ 876,750**
PROGRAM SUBTOTALS							
Residential	$ 513,580	$ 10,381	$ 640,974	$ 4,962,037	$ 55,707	$ 15,680	**$ 6,198,359**
C&I	$ 605,254	$ 10,450	$ 495,800	$ 5,033,071	$ 57,500	$ 55,000	**$ 6,257,075**
Other	$ 113,770	$ -	$ 477,980	$ -	$ -	$ -	**$ 591,750**
TOTAL BUDGET	**$ 1,232,604**	**$ 20,831**	**$ 1,614,754**	**$ 9,995,108**	**$ 113,207**	**$ 70,680**	**$ 13,047,184**

YGS

2012 Gas Conservation

Budget By Expense Class

Increased Savings



Expense Classes		Budget	% of Budget
Labor	$	1,232,604	9.4%
Materials & Supplies	$	20,831	0.2%
Outside Services	$	1,614,754	12.4%
Incentives	$	9,995,108	76.6%
Marketing	$	113,207	0.9%
Administrative Expenses	$	70,680	0.5%
Total	**$**	**13,047,184**	**100.00%**

Table C
CNG 2012 Budget Details
INCREASED SAVINGS

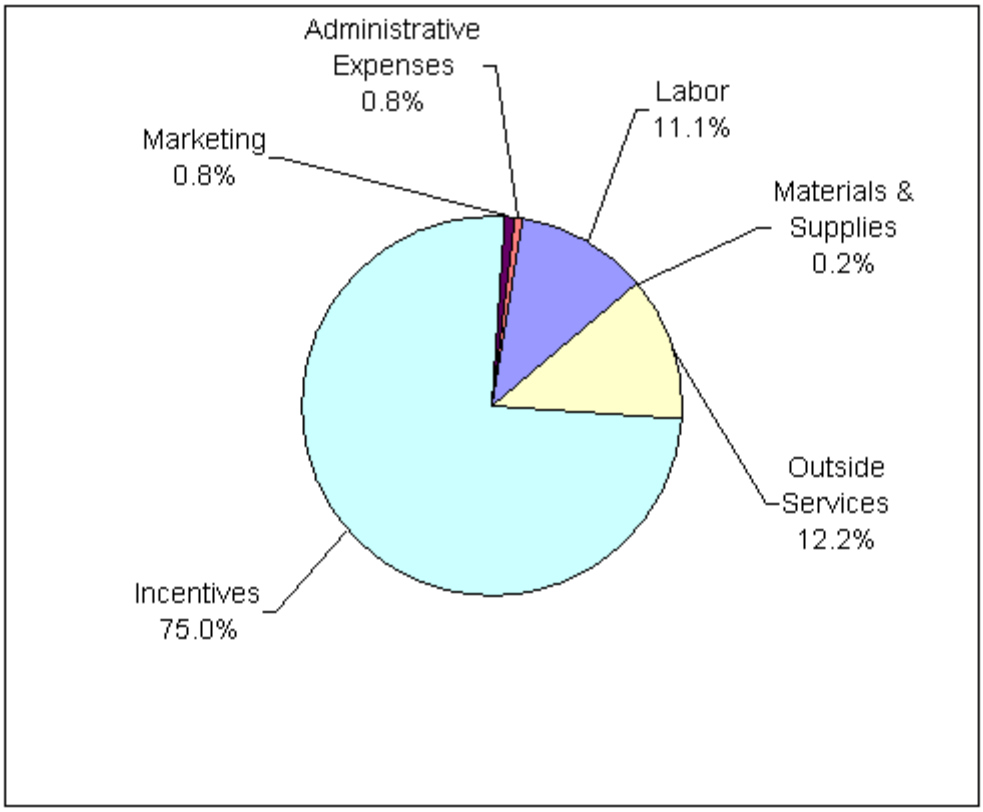
GAS CONSERVATION BUDGET ($000)	Labor	Materials & Supplies	Outside Services	Incentives	Marketing	Administrative Expenses	TOTAL
RESIDENTIAL							
HES Income Eligible - Weatherization	$ 168,744	$ 3,500	$ 44,350	$ 1,851,750	$ 7,800	$ 2,600	$ 2,078,744
HES Income Eligible - Audits			$ 25,772				$ 25,772
HES Income Eligible Total	**$ 168,744**	**$ 3,500**	**$ 70,122**	**$ 1,851,750**	**$ 7,800**	**$ 2,600**	**$ 2,104,516**
Home Energy Solutions (HES)	$ 297,920	$ 5,040	$ 24,466	$ 2,479,619	$ 37,644	$ 7,560	$ 2,852,249
Residential New Construction	$ 33,250	$ 840	$ 53,305	$ 251,545	$ 8,260	$ 2,800	$ 350,000
Water Heating	$ 5,000	$ 500	$ 2,305	$ 23,800	$ 6,450	$ 2,000	$ 40,055
Subtotal Residential	**$ 504,914**	**$ 9,880**	**$ 150,198**	**$ 4,606,714**	**$ 60,154**	**$ 14,960**	**$ 5,346,820**
COMMERCIAL & INDUSTRIAL LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 295,320	$ 6,500	$ 211,263	$ 1,811,381	$ 12,500	$ 25,500	$ 2,362,464
Subtotal C&I - Lost Opportunity	**$ 295,320**	**$ 6,500**	**$ 211,263**	**$ 1,811,381**	**$ 12,500**	**$ 25,500**	**$ 2,362,464**
COMMERCIAL & INDUSTRIAL LARGE RETROFIT							
Energy Opportunities	$ 202,749	$ 1,200	$ 200,595	$ 1,304,784	$ 8,200	$ 17,800	$ 1,735,328
Operations & Maintenance	$ 51,347	$ 1,500	$ 12,850	$ 113,818	$ 3,500	$ 7,500	$ 190,515
Subtotal C&I - Retrofit	**$ 254,096**	**$ 2,700**	**$ 213,445**	**$ 1,418,602**	**$ 11,700**	**$ 25,300**	**$ 1,925,843**
Small Business	$ 20,922	$ 1,250	$ 5,800	$ 143,557	$ 2,200	$ 18,715	$ 192,444
Subtotal C&I	**$ 570,338**	**$ 10,450**	**$ 430,508**	**$ 3,373,540**	**$ 26,400**	**$ 69,515**	**$ 4,480,751**
OTHER - PROGRAMS/REQUIREMENTS & PLANNING							
CHIF Loan Fund			$ 75,000				$ 75,000
Residential Financing Subsidies			$ 135,000				$ 135,000
C&I Financing Subsidies			$ 75,000				$ 75,000
Information Technology			$ 45,000				$ 45,000
Planning	$ 76,500		$ -				$ 76,500
Evaluation	$ 25,270		$ 361,730				$ 387,000
Energy Efficiency Board			$ 24,750				$ 24,750
Subtotal Other	**$ 101,770**	**$ -**	**$ 716,480**	**$ -**	**$ -**	**$ -**	**$ 818,250**
PROGRAM SUBTOTALS							
Residential	$ 504,914	$ 9,880	$ 360,198	$ 4,606,714	$ 60,154	$ 14,960	**$ 5,556,820**
C&I	$ 570,338	$ 10,450	$ 505,508	$ 3,373,540	$ 26,400	$ 69,515	**$ 4,555,751**
Other	$ 101,770	$ -	$ 431,480	$ -	$ -	$ -	**$ 533,250**
TOTAL BUDGET	**$ 1,177,022**	**$ 20,330**	**$ 1,297,186**	**$ 7,980,254**	**$ 86,554**	**$ 84,475**	**$ 10,645,821**

CNG

2012 Gas Conservation

Budget By Expense Class

Increased Savings



Expense Classes		Budget	% of Budget
Labor	$	1,177,022	11.1%
Materials & Supplies	$	20,330	0.2%
Outside Services	$	1,297,186	12.2%
Incentives	$	7,980,254	75.0%
Marketing	$	86,554	0.8%
Administrative Expenses	$	84,475	0.8%
Total	**$**	**10,645,821**	**100.00%**

Table C
SCG 2012 Budget Details
INCREASED SAVINGS

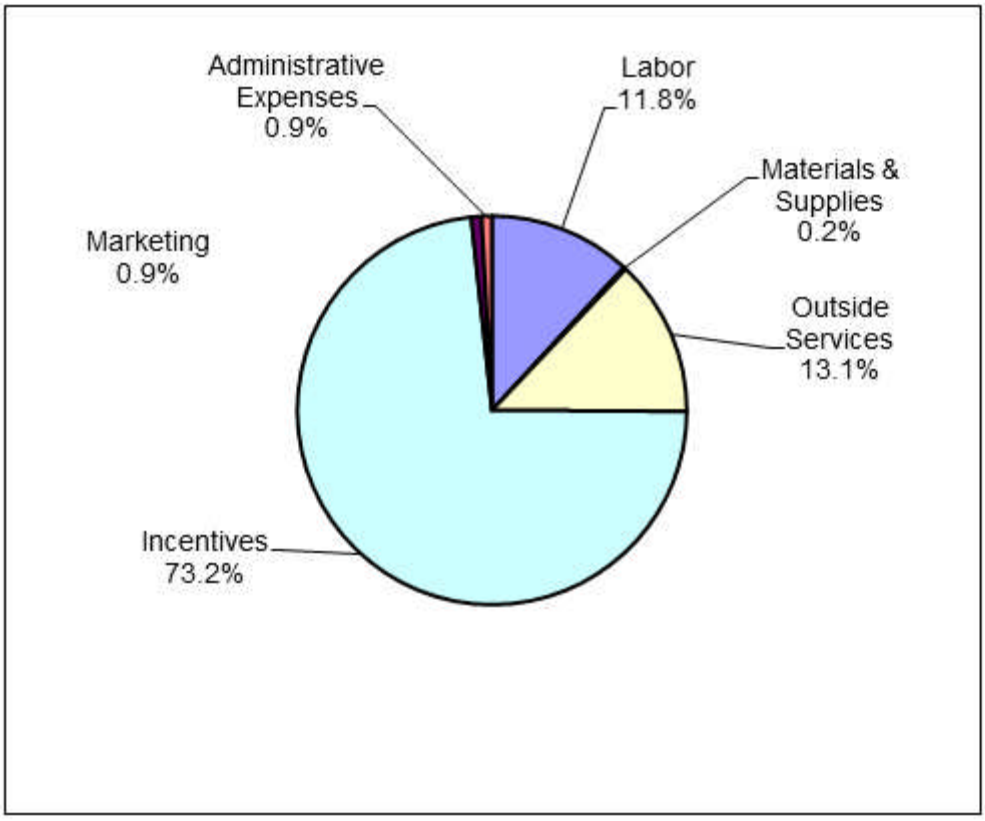
GAS CONSERVATION BUDGET ($000)	Labor	Materials & Supplies	Outside Services	Incentives	Marketing	Administrative Expenses	TOTAL
RESIDENTIAL							
HES Income Eligible - Weatherization	$ 164,994	$ 3,960	$ 45,550	$ 2,091,114	$ 8,910	$ 2,970	$ 2,317,498
HES Income Eligible - Audits			$ 25,803				$ 25,803
HES Income Eligible Total	**$ 164,994**	**$ 3,960**	**$ 71,353**	**$ 2,091,114**	**$ 8,910**	**$ 2,970**	**$ 2,343,301**
Home Energy Solutions (HES)	$ 297,920	$ 5,040	$ 249,704	$ 2,495,793	$ 37,644	$ 7,560	$ 3,093,661
Residential New Construction	$ 33,250	$ 720	$ 45,690	$ 210,860	$ 7,080	$ 2,400	$ 300,000
Water Heating	$ 5,000	$ 496	$ 2,638	$ 28,600	$ 7,477	$ 2,000	$ 46,211
Subtotal Residential	**$ 501,164**	**$ 10,216**	**$ 369,385**	**$ 4,826,367**	**$ 61,111**	**$ 14,930**	**$ 5,783,173**
COMMERCIAL & INDUSTRIAL LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 273,145	$ 618	$ 200,867	$ 1,587,227	$ 6,040	$ 12,565	$ 2,080,462
Subtotal C&I - Lost Opportunity	**$ 273,145**	**$ 618**	**$ 200,867**	**$ 1,587,227**	**$ 6,040**	**$ 12,565**	**$ 2,080,462**
COMMERCIAL & INDUSTRIAL LARGE RETROFIT							
Energy Opportunities	$ 156,500	$ 2,250	$ 119,500	$ 1,153,576	$ 6,700	$ 18,760	$ 1,457,286
Operations & Maintenance	$ 47,339	$ 188	$ 18,800	$ 113,045	$ 940	$ 3,738	$ 184,050
Subtotal C&I - Retrofit	**$ 203,839**	**$ 2,438**	**$ 138,300**	**$ 1,266,621**	**$ 7,640**	**$ 22,498**	**$ 1,641,336**
Small Business	$ 20,954	$ 2,250	$ 6,300	$ 137,508	$ 2,200	$ 18,551	$ 187,763
Subtotal C&I	**$ 497,938**	**$ 5,306**	**$ 345,467**	**$ 2,991,356**	**$ 15,880**	**$ 53,614**	**$ 3,909,561**
OTHER - PROGRAMS/REQUIREMENTS & PLANNING							
CHIF Loan Fund			$ 75,000				$ 75,000
Residential Financing Subsidies			$ 135,000				$ 135,000
C&I Financing Subsidies			$ 75,000				$ 75,000
Information Technology			$ 45,000				$ 45,000
Planning	$ 76,500						$ 76,500
Evaluation	$ 25,270		$ 361,730				$ 387,000
Energy Efficiency Board			$ 24,750				$ 24,750
Subtotal Other	**$ 101,770**	**$ -**	**$ 716,480**	**$ -**	**$ -**	**$ -**	**$ 818,250**
PROGRAM SUBTOTALS							
Residential	$ 501,164	$ 10,216	$ 579,385	$ 4,826,367	$ 61,111	$ 14,930	**$ 5,993,173**
C&I	$ 497,938	$ 5,306	$ 420,467	$ 2,991,356	$ 15,880	$ 53,614	**$ 3,984,561**
Other	$ 101,770	$ -	$ 431,480	$ -	$ -	$ -	**$ 533,250**
TOTAL BUDGET	**$ 1,100,872**	**$ 15,522**	**$ 1,431,332**	**$ 7,817,723**	**$ 76,991**	**$ 68,544**	**$ 10,510,984**

SCG

2012 Gas Conservation

Budget By Expense Class

Increased Savings



Expense Classes		Budget	% of Budget
Labor	$	1,100,872	10.5%
Materials & Supplies	$	15,522	0.1%
Outside Services	$	1,431,332	13.6%
Incentives	$	7,817,723	74.4%
Marketing	$	76,991	0.7%
Administrative Expenses	$	68,544	0.7%
Total	**$**	**10,510,984**	**100.00%**

EXHIBIT I: 2010 PUBLIC COMMENT MATRIX

To be filed at a later date.

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EXHIBIT II: ENERGY EFFICIENCY BOARD RESOLUTIONS (Electric and Natural Gas)

The Energy Efficiency Board's Resolutions will be filed at a later date.

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EXHIBIT III: PURA COMPLIANCE ORDERS (Electric and Natural Gas)

Orders

In its January 6, 2011 Final Decision ("Decision) in Docket Nos. 10-10-03 and 10-10-04, the Public Utilities Regulatory Authority ("PURA" or the "Authority") issued a series of Orders and compliance dates. The following information provides the Electric Companies and Natural Gas Companies responses to those Orders and, where appropriate, refers to the associated document of record.

Orders - Docket No. 10-10-03

1. On or before September 1, 2011 and annually thereafter, the EDC's shall submit the 2012 C&LM Plan and budget to the Department for review.

PURA, in their letter dated August 30, 2011, granted an extension to file the 2012 C&LM Plan on October 1, 2011.at the request of the EEB

2. When providing estimates and recommendations to customers, the HES program shall clearly indicate that savings are based on general information and not customer specific data.

CL&P filed a letter with PURA dated February 25, 2011 in compliance with this Order.
UI filed a letter with PURA dated March 1, 2011 in compliance with this Order.

3. There shall be no bonus incentives to vendors or the EDCs to promote appliances, A/C or space or hot water heating equipment replacements at this time.

CL&P filed a letter with PURA dated February 25, 2011 in compliance with this Order.
UI filed a letter with PURA dated March 1, 2011 in compliance with this Order.

4. The EDC's shall pay less than 50 percent of the $500 rebate for gas furnaces with efficient electric fans in the HES program. The allowed incentive should be based on the electric proportion of the total gas and electric avoided cost savings.

CL&P filed a letter with PURA dated February 25, 2011 in compliance with this Order.
UI filed a letter with PURA dated March 1, 2011 in compliance with this Order.

5. The Department will require the electric and gas utilities to immediately discontinue the vendor installation requirement for insulation rebates in the HES program.

CL&P filed a letter with PURA dated February 25, 2011 in compliance with this Order.
UI filed a letter with PURA dated March 1, 2011 in compliance with this Order.

6. Effective with the date of this Decision, the Energy Efficiency Board shall modify the Evaluation process, as described in Section II.E., herein.

In compliance with this Order, the EEB submitted a revised Evaluation Roadmap and Communications Protocol, which received final approval from the board on July 26, 2011. It was noted that earlier versions of these revisions were approved by the board in June, shortly before the contents of SB 1243 (now PA 11-80) became known. In order to take into account changes included in Section 33 of the new legislation that impact the procedures outlined in the Roadmap and Protocol, the EEB decided to postpone the finalization and submission of these procedures until the appropriate changes could be made and submitted to the membership a second time for approval. On September 15, 2011, the Energy Efficiency Board submitted revised Rules and Roadmap, adopted by board resolution at its regular business meeting on August 10, 2011. The revisions have been made to reflect changes in the organization and responsibilities of the board called for by Public Act 11-80. The new version also includes the Evaluation Roadmap the board created pursuant to DPUC Docket 10-10-03 Decision Order no. 6, likewise reflecting the requirements of PA 11-80. The Evaluation Roadmap was already filed separately with the PURA on July 26, 2011, but is now included as an integral part of the Rules and Roadmap for the board as a whole.

7. A billing analysis shall be performed on at least one Energy Efficiency Fund program in 2011 and annually thereafter. The results of the engineering estimates and billing analysis should be compared and reconciled.

The recently completed evaluation of the Energy Conscious Blueprint Program (Energy Conscious Blueprint Evaluation Final Report, Submitted by Global Energy Partners to the Connecticut Energy Efficiency Board, August 4, 2011) utilized a billing analysis methodology to compare and rectify the program engineering estimates with customer bills.

8. Where appropriate, the Energy Efficiency Board shall recommend to the Legislature, legislation for efficiency requirements that will improve the energy efficiency of products and equipment sold in Connecticut.

This Order is directed to the EEB.

9. The EDCs shall adjust their 2011 performance goals as indicated Section II.G.

CL&P filed a letter with PURA dated March 15, 2011 in compliance with Order No. 15 which included the adjusted 2011 performance goals.
UI filed a letter with PURA dated March 15, 2011 in compliance with Order No. 15 which included the adjusted 2011 performance goals.

10. On or before February 15, 2011, the EDCs shall eliminate the distribution of watt meters under the HES Program as discussed in Section II.C.1.b., herein.

CL&P filed a letter with PURA dated February 25, 2011 in compliance with this Order.
UI filed a letter with PURA dated March 1, 2011 in compliance with this Order.

11. On or before March 30, 2011 the Energy Efficiency Board shall submit the proposed ISE work plan and budget to the Department. The ISE shall submit to the Energy Efficiency Board a work plan and budget for 2011 that provides ISE with sufficient resources to implement the K-12 program on a larger scale to increase the number of training sessions for schools and a broader scope to include training for municipalities and/or health care facilities.

In its letter to PURA dated March 15, 2011, the EEB submitted the proposed ISE work plan and budget.

12. On or before February 15, 2011, the Energy Efficiency Board shall submit a recommendation to the Department on EO and SBEA kWh savings, program budget adjustments, and incentive matrix weighting to provide "stretch" incentives for the percentage of comprehensive projects installed, as described in Section II.D.4; herein.

In its letter to PURA dated February 15, 2011, the EEB provided recommendations as required by this Order.

13. On or before March 1, 2011, the EDCs shall post a general, yet accurate description of program incentive levels for each of the C&I programs on their web sites.

CL&P filed a letter with PURA dated February 23, 2011in compliance with this Order.
UI filed a letter with PURA dated March 1, 2011in compliance with this Order.

14. On or before March 1, 2011, the EDCs shall submit a complete reconciliation of 2009 and 2010 carry forwards for both revenue and budget.

In a letter to PURA dated March 1, 2011, CL&P filed a complete reconciliation of 2009 and 2010 carry forwards for both revenue and budget. In addition, actual Incentive Matrix results for 2010 were filed based on the Authority's requirement (page 45 of the Decision) "Actual (Incentive Matrix) results for 2010 should be filed by the EDCs in the first quarter of 2011 after all of the 2010 results are final."

In a letter to PURA dated March 1, 2011, UI filed a complete reconciliation of 2009 and 2010 carry forwards for both revenue and budget. In addition, actual Incentive Matrix results for 2010 were filed based on the Authority's requirement (page 45 of the Decision) "Actual (Incentive Matrix) results for 2010 should be filed by the EDCs in the first quarter of 2011 after all of the 2010 results are final."

15. On or before March 15, 2011 the EDCs shall submit a revised budget schedule A1 to include the $18.3 million in carryover.

In its letter to PURA dated March 15, 2011, CL&P submitted a revised budget schedule A1 including the $18.3 million in carryover.

In its letter to PURA dated March 15, 2011, UI submitted a revised budget schedule A1 including the $18.3 million in carryover.

16. On or before March 15, 2011, ISE shall work with the Energy Efficiency Board and the Energy Efficiency Board Evaluation Consultant to incorporate additional program measure data to be included as an ongoing component of the K-12 training program, provided that the cost of collecting the data is not burdensome.

On March 15, 2011, the EEB filed a letter with PURA in compliance with this Order.

17. On or before April 4, 2011, the EDCs shall notify the Department regarding any additional opportunities to offer HPWH rebates as discussed in Section II.C.2., herein.

In a joint letter filed with PURA on April 4, 2011, CL&P and UI provided information regarding additional opportunities for HPWH rebate offerings.

18. On or before April 4, 2011, the EDCs shall report to the Department regarding the development of educational material, including web based information about HPWHs and available rebates as discussed in Section II.C.2., herein.

In a joint letter filed with PURA on April 4, 2011, CL&P and UI reported to the Authority the information required by this Order.

19. On or before April 4, 2011, The ISE shall submit to the Energy Efficiency Board a conceptual plan to extend an O&M training program to municipalities and health care facilities in 2012, as discussed in herein.

In a letter filed with PURA on April 4, 2011, the EEB filed a letter comprised of the ISE's conceptual plan for the 2012 O&M training program for municipalities.

20. On or before April 4, 2011, the Energy Efficiency Board shall submit the manner in which the EDCs will be allowed to count the savings provided under the Partners Program toward the EDC's C&LM goals as discussed in Section II.D.7., herein.

In a letter dated April 18, 2011, the EEB filed a letter with PURA in compliance with this Order.

21. On or before June 2, 2011, the EDCs shall develop, and be prepared to maintain, an interactive tool to provide customers with the information necessary to compare available choices for their end use needs as discussed in Section II.D.6, herein.

In accordance with Section II.D.6, the Companies held a technical session with members of the Authority on August 23, 2011 in which the prototype of the proposed interactive equipment selection tool was presented, including the cost estimate. Prior to the technical session, the Companies filed two letters with the Authority on May 24, 2011 and again on August 5, 2011. Both letters provided a status

update of this order as well as requesting deadline extensions. The Companies were instructed during this technical session that they would receive further direction from the Authority with respect to Interactive Tool at a later date.

22. On or before July 1, 2011, ISE, together with the Energy Efficiency Board, shall develop a code training curriculum that embodies the "hands on" and student engagement components that are appropriate to train the building trades in code compliance, as described in Section II.D.1., herein.

In collaboration with the ISE and EEB, CL&P and UI submitted a letter to PURA in compliance with this Order on April 1, 2011.

23. On or before July 1, 2011, ISE shall implement a delivery mechanism of code training to reach the building trades: electricians, plumbers, building contracts and construction professionals, particularly those involved in the construction of C&I buildings, as described in Section II.D.1., herein. ISE shall report on these efforts on a quarterly basis.

In collaboration with the ISE and EEB, CL&P and UI submitted a letter to PURA in compliance with this Order on April 1, 2011.

24. At the time of the next ISE O&M Training program evaluation, the Energy Efficiency Board shall work with its evaluation consultant to develop an independent evaluation, commensurate with the program costs expended.

This Order is directed to the EEB.

25. The EDCs shall conduct a workgroup to promote best practices and develop a standardized performance contract to submit in the next annual Plan, as described in Section II.D.2., herein. The EDCs shall report quarterly on the milestones of the workgroup toward the goal of developing a standardized performance contract for the 2012 Plan.

The EDCs have provided PURA with quarterly progress updates during 2011 and have included a summary of the final results in this 2012 Plan in the introduction section to Chapter 3. The final draft of the Best Practices Guide, dated September 12, 2011, was summarized and presented to the EEB for comments at the September 14 EEB meeting.

26. On or before September 1, 2011, as part of the 2012 C&LM Plan the EDCs, LDCs, Companies, ECMB and/or ISE (as appropriate) shall:

a. report on ways to improve the effectiveness of the Kitchen Table Wrap Up as discussed in Section II.A.1.a., herein;

In 2011, the EDCs instituted a requirement for HES vendors to provide customers with a Home Energy Yardstick (HEY) score. The HEY score provides customers a normalized energy consumption ranking, and also provides savings and payback information for possible energy efficiency upgrades.

b. report on the potential to license HES vendors as discussed in Section II.A.1.c., herein;

Currently, the EDCs use minimum standards for HES vendors developed by Building Performance Institute (BPI) and also require vendors be registered by the State of Connecticut as Home Improvement Contractors. The EDCs utilize these criteria for HES vendors because formal licensing requirements for HES vendors can only be made through legislative activity.

c. develop a market transformation plan and timeline for the HES program as discussed in Section II.A.1.,c., herein;

A discussion regarding a market transformation plan and timeline for the HES program is summarized in this 2012 Plan Chapter 2 beginning on page 59.

d. submit a summary of the UI research into storage type HPWHs and recommendations regarding the potential to promote storage type HPWHs to encourage off-peak consumption as discussed in Section II.C.3., herein;

For nearly 50 years, UI's Off Peak Water Heating Program has offered customers a means to control their water heating costs. In UI's service territory there are approximately 46,000 customers using electric water heaters. Of this base, about 24,000 customers have clock controlled water heaters that operate the water heaters during the off peak hours for reduced water heating costs. About 12,000 of these customers rent their tanks through the UI Water Heater Rental Program. These timer controlled tanks, coupled with UI's time-of-day rates, tend to shift the majority of water heating to off-peak hours and save customers money on their water heating bills.

Over the past decade, UI has always kept an eye on the emerging water heating technology of the Heat Pump Water Heater. Over the years, progress and advances to this technology have been steadily advancing forward and UI has participated in several demonstration installations of early HPWH models.

In preparation for increased marketing efforts of HPWH's through its Residential Water Heating Program, UI is currently conducting a 2011 Residential Heat Pump Water Heater impact and customer acceptance study with an independent third party engineering firm. For this study, approximately thirty (30) units will be installed and monitored over a six-month period that includes both summer and winter months. The HPWH's that will be used in this study are integrated units that are comprised of a water storage tank and HPWH in one single manufactured package.

This study will determine the annual energy usage and savings (including savings related to water heating, dehumidification, and air conditioning) associated with the installation. UI will also be seeking to obtain information about customer acceptance of technology and perspectives concerning factors such as savings, comfort, aesthetics, and noise at the end of this HPWH Study.

In 2009, UI conducted a similar pilot using an after-market, add-on HPWH that was piped to existing electric water heaters. Although the energy savings were promising, the added costs of the HPWH unit and associated installation labor, did not result in customer savings.

The results of this current effort will allow UI will also compare performance to manufacturer efficiency or savings claims and thus fine tune customer incentives and future marketing initiatives.

e. develop long term goals as discussed in Section G and submit them at the time of their 2012 C&LM filing;

The 2012 C&LM Plan includes a detailed proposal in Chapter 8 based on a long term goal of achieving annual savings approximately equal to 2 percent of forecasted kWh sales.

f. Report the number of completed EO projects and kW and kWh associated with performance contracts during 2011. The Energy Efficiency Board shall report on the costs and benefits of EO projects that are implemented with performance contracts during 2011, as described in Section II.D.2 herein.

CL&P reports that two performance contract-related projects had 2011 milestone inspections as of September 23, which had an associated 2,254 annual MWh savings, 32,177 lifetime MWh savings, 413 kW summer and 149 kW winter demand savings, respectively. These two projects involved a university and a hospital.

CL&P forecasts that by December 31, 2011, these same two projects will complete milestone inspections for an additional savings of 3,532 Annual MWh, 42,695 Lifetime MWh, 111,174 Annual CCF and 1,078,767 Lifetime CCF. CL&P also forecasts that, by December 31, 2011, two municipalities will complete milestone inspections for performance contract-related projects involving between 12 and 14 individual buildings. CL&P forecasts that these projects will save 2,312 Annual MWh, 27,233 Lifetime MWh, 43,345 Annual CCF and 433,420 Lifetime CCF.

Currently, UI reports that there is one performance contract related project in the process of being installed as of September 23 2011, which has projected savings of 1,583 annual MWh savings, 19,984 lifetime MWh savings, 118 kW summer demand savings, 78 kW winter demand savings, 37,847 CCF and 378,470 lifetime CCF savings respectively. In addition, the Company is expecting the signing of a second performance contract related project. This contract will involve thirty-three (33) municipal buildings with forecasted savings of approximately 156,594 annual CCF, 1913,845 lifetime CCF, 1,470 MWh and 600 kW.

g. As directed in Section II.C.5., herein, the EDCs shall provide in the annual 2012 Plan an update on the planned and achieved milestones in Federal, state and regional efficiency standards as they affect consumer products, appliances and equipment sold in Connecticut.

The EDCs are actively involved in the Northeast Energy Efficiency Partnership (NEEP) Appliance Efficiency Standards Initiative. The NEEP Initiative is a regional coalition of stakeholders advocating for the enactment of state and federal efficiency standards for a wide range of residential and commercial products. In addition, the EDCs currently plan on including efficiency standards as a mechanism to achieve savings in the 2012 Integrated Resource Plan (IRP).

h. Submit a recommendation regarding the SmartLiving Center as discussed in Section II.I., herein.

A recommendation regarding the SmartLiving Center is summarized in this 2012 Plan within Chapter Four; Section SmartLiving Center and Museum Partnerships.

i. The Department requires a forecast through the end of the current year is to be submitted that includes all revenue and spending for each company and broken down in the same design as Tables A1 & A2 in the plan for the current years plan.

Connecticut Light & Power Company
Docket No. 10-10-03
Order 26i
Page 1 of 2

2011 CL&P Program Expenditures Forecast

CL&P C&LM BUDGET	2011 CL&P YTD Results As of 06/30/11	2011 CL&P Year-End Forecast 12/31/11	2011 CL&P Revised Budget 06/30/11	2011 CL&P Variance to Budget
RESIDENTIAL				
Residential Retail Products Note 1	$ 3,825,562	$ 6,891,842	$ 6,132,901	$ 758,941
Appliance Rebate Program	$ 3,502	$ 3,502	$ -	$ 3,502
Total - Consumer Products	**$ 3,829,064**	**$ 6,895,344**	**$ 6,132,901**	**$ 762,443**
Residential New Construction	$ 705,716	$ 1,435,799	$ 1,460,024	$ (24,225)
Home Energy Solutions (HVAC, Duct Sealing, Lighting) Note 4	$ 9,810,124	$ 17,184,702	$ 17,749,370	$ (564,668)
HES Income Eligible	$ 4,344,644	$ 10,721,229	$ 11,027,047	$ (305,818)
Subtotal Residential	**$ 18,689,548**	**$ 36,237,074**	**$ 36,369,342**	**$ (132,268)**
COMMERCIAL & INDUSTRIAL				
C&I LOST OPPORTUNITY				
Energy Conscious Blueprint	$ 5,341,989	$ 7,620,707	$ 8,759,606	$ (1,138,899)
Total - Lost Opportunity	**$ 5,341,989**	**$ 7,620,707**	**$ 8,759,606**	**$ (1,138,899)**
C&I LARGE RETROFIT				
Energy Opportunities	$ 18,134,254	$ 25,771,561	$ 25,935,919	$ (164,358)
O&M (Services, RetroCx, BSC)	$ 774,429	$ 3,028,288	$ 4,729,740	$ (1,701,452)
PRIME	$ 217,498	$ 458,037	$ 488,087	$ (30,050)
Total - C&I Large Retrofit	**$ 19,126,181**	**$ 29,257,886**	**$ 31,153,746**	**$ (1,895,860)**
Small Business	$ 7,083,730	$ 12,716,001	$ 13,436,752	$ (720,751)
Subtotal C&I	**$ 31,551,900**	**$ 49,594,594**	**$ 53,350,104**	**$ (3,755,510)**
OTHER - EDUCATION *				
SmartLiving Center® - Museum Partnerships	$ 52,716	$ 396,256	$ 400,000	$ (3,744)
EE Communities / Behavior Pilot	$ 296,910	$ 987,681	$ 850,000	$ 137,681
K-8 Education	$ 88,369	$ 302,145	$ 225,000	$ 77,145
Subtotal Education	**$ 437,995**	**$ 1,686,082**	**$ 1,475,000**	**$ 211,082**
OTHER - PROGRAMS/REQUIREMENTS				
Institute for Sustainable Energy (ECSU)	$ 200,000	$ 448,000	$ 448,000	$ -
Residential Loan Program (Includes ECLF)	$ 2,412,280	$ 3,440,985	$ 3,650,000	$ (209,015)
C&I Loan Program	$ 34,642	$ 484,697	$ 475,000	$ 9,697
C&LM Loan Defaults	$ 37,200	$ 137,400	$ 135,000	$ 2,400
Subtotal Programs/Requirements	**$ 2,684,122**	**$ 4,511,082**	**$ 4,708,000**	**$ (196,918)**
OTHER - LOAD MANAGEMENT				
ISO Load Response Program Note 2	$ 2,833,144	$ 5,677,134	$ 3,000,000	$ 2,677,134
Subtotal Load Management	**$ 2,833,144**	**$ 5,677,134**	**$ 3,000,000**	**$ 2,677,134**
OTHER - RENEWABLES & RD&D				
Research, Development & Demonstration	$ 52,361	$ 213,361	$ 200,000	$ 13,361
Subtotal Renewables & RD&D	**$ 52,361**	**$ 213,361**	**$ 200,000**	**$ 13,361**
OTHER - ADMINISTRATIVE & PLANNING				
Administration	$ 447,455	$ 964,805	$ 900,000	$ 64,805
General Awareness	$ 14,884	$ 172,039	$ 176,651	$ (4,612)
Planning Note 3	$ 314,339	$ 676,939	$ 650,000	$ 26,939
Evaluation Note 3	$ 400,351	$ 1,498,569	$ 1,800,000	$ (301,431)
Information Technology	$ 896,518	$ 1,761,617	$ 1,700,000	$ 61,617
Energy Efficiency Board	$ 195,141	$ 400,018	$ 400,000	$ 18
Performance Management Fee	$ -	$ 4,800,000	$ 5,216,455	$ (416,455)
Subtotal Admin/Planning Expenditures	**$ 2,268,688**	**$ 10,273,987**	**$ 10,843,106**	**$ (569,119)**
PROGRAM SUBTOTALS				
Residential	$ 21,481,805	$ 41,224,985	$ 41,385,663	$ (160,678)
C&I	$ 34,529,788	$ 56,205,020	$ 57,245,434	$ (1,040,414)
Other*	$ 2,506,165	$ 10,763,309	$ 11,314,455	$ (551,146)
TOTAL C&LM BUDGET	**$ 58,517,758**	**$ 108,193,314**	**$ 109,945,552**	**$ (1,752,238)**
TOTAL	**$ 58,517,758**	**$ 108,193,314**	**$ 109,945,552**	**$ (1,752,238)**

* OTHER -EDUCATION is primarily allocated to residential programs.

Note 1: Retail Products includes Retail Lighting and ENERGY STAR Appliances.
Note 2: ISO-NE Load Response Customer payments are funded from the Forward Capacity Market
Note 3: Planning and Evaluation activities split into separate budget line items.
Note 4: Residential HVAC program renamed "Home Energy Solutions" and is comprised of HVAC, Duct Sealing, Lighting, Energy Conservation Loan and Residential Audits.

2011 C&LM Fund Balance Forecast (000s)

Revenues	2011 Plan Budget	YTD ACTUAL 6/30/2011	6 Month Forecast	Year End Forecast	Variance
2010 Unspent Funds	$ 23,812	$ 23,687	$ -	$ 23,687	$ (125)
Collections	66,368	32,734	$ 34,097	66,831	463
ISO-NE FCM	6,400	4,489	$ 3,364	7,853	1,453
ISO-NE FCM Demand Response	3,000	3,685	$ 1,763	5,448	2,448
Class III REC's	4,000	753	$ 2,847	3,600	(400)
Carrying Charges	1,500	1,109	$ 729	1,838	338
RGGI	4,865	2,147	$ 2,718	4,865	-
Stimulus Funding	-	2,416	$ -	2,416	2,416
Total	$ 109,945	$ 71,020	$ 45,518	$ 116,538	$ 6,593
Year End Expenditures Forecast				$ 108,193	
Year End C&LM Fund Balance Forecast				**$ 8,345**	

2011 Program Expenditures Forecast (000s)

	2011 YTD Actual Expenses @ 6/30/2011	2011 Year End Forecast	2011 Budget 3/15/2011	2011 Year End Forecast vs Budget
C&LM Programs:				
Residential Programs				
Retail Products	$2,725	$2,906	$2,133	$773
Residential New Construction	128	215	215	0
Home Energy Solutions	2,183	2,961	2,961	(0)
Low Income (UI Helps)	888	2,499	2,499	(0)
Total Residential	**$5,925**	**$8,581**	**$7,808**	**$773**
Commercial & Industrial				
Energy Blueprint*	$2,064	$3,175	$3,175	($0)
Energy Opportunities**	3,534	5,377	4,377	1,000
Small Business Energy Advantage	737	2,718	2,718	(0)
Total Commercial & Industrial	**$6,335**	**$11,269**	**$10,270**	**$1,000**
Education/Other				
SmartLiving Center	$233	$459	$459	$0
K-8 Education	134	402	402	(0)
EE Communities	29	177	177	(0)
Total Education/Other	**$396**	**$1,038**	**$1,038**	**($0)**
Other Expenditures				
Institute for Sustainable Energy (ECSU)	$56	$112	$112	$0
Residential Loan Program	229	429	589	(160)
Administration	309	647	647	(0)
Planning & Evaluation	229	739	739	(0)
Information Technology	156	243	243	0
Research, Development & Demonstration	10	125	125	0
General Awareness	0	50	50	0
CLM Loan Defaults	31	50	50	0
UI CLM Shareholder Incentive	542	1,083	1,083	0
EEB	51	210	210	0
Total Other Expenditures	**$1,614**	**$3,687**	**$3,848**	**($161)**
Sub-Total C&LM Programs	**$14,269**	**$24,575**	**$22,964**	**$1,612**
ARRA Programs:				
Home Energy Solutions	$23	$310	$0	$310
Sub-Total ARRA Programs	**$23**	**$310**	**$0**	**$310**
GRAND TOTAL	**$14,292**	**$24,885**	**$22,964**	**$1,922**

*Includes Energy Blueprint, Motors and Cool Choice
**Includes EO, Municipal Energy, C&I Financing and O&M RFP Programs

2011 C&LM Fund Balance Forecast (000s)

Revenues	2011 Plan Budget	YTD ACTUAL 6/30/2010	6 Month Forecast	Year End Forecast	Variance
2010 Unspent Funds	$ 2,181	$ 2,181	$ -	$ 2,181	$ -
Collections	16,182	8,058	8,842	16,900	718
ODR	1,500	1,105	1,045	2,150	650
Class III	1,000	210	915	1,125	125
RGGI	2,100	724	376	1,100	(1,000)
Stimulus Funding	-	300	-	300	300
Total	$ 22,963	$ 12,578	$ 11,178	$ 23,756	$ 793
Year End Expenditures Forecast				$24,885	
Year End C&LM Fund Balance Forecast				**$ (1,129)**	

Combined Gas Company Results
Docket No. 10-10-03

2011 Program Expenditures Forecast (000s)

	2011 YTD Actual Expenses @ 6/30/2011	2011 Year End Forecast	2011 Budget 10/1/2010	2011 Year End Forecast vs Budget
C&LM Programs:				
Residential Programs				
HES Income Eligible	$1,918	$4,795	$2,682	$2,113
Home Energy Solutions	2,563	5,644	4,600	1,044
Residential New Construction	521	1,286	1,150	136
Water Heating	106	318	363	(45)
Total Residential	**$5,107**	**$12,044**	**$8,795**	**$3,249**
Commercial & Industrial				
Energy Conscious Blueprint	$1,620	$3,662	$3,670	($8)
Energy Opportunities	745	3,414	2,480	934
O&M	132	327	400	(73)
Total Commercial & Industrial	**$2,496**	**$7,402**	**$6,550**	**$852**
Other - Programs/Requirements				
CHIF Loan Fund	$0	$150	$150	$0
Residential Financing Subsidies	0	135	270	(135)
C&I Financing Subsidies	0	75	150	(75)
Total Education/Other	**$0**	**$360**	**$570**	**($210)**
Other Expenditures				
Information Technology	$0	$80	$95	(15)
Planning	52	139	161	(22)
Evaluation	19	650	650	0
Energy Efficiency Board (EEB)	14	49	50	(1)
Total Other Expenditures	**$85**	**$918**	**$956**	**($38)**
Total	**$7,688**	**$20,725**	**$16,871**	**$3,854**

YGS
Docket No. 10-10-03
Order No. 26i

2011 Program Expenditures Forecast (000s)

	2011 YTD Actual Expenses @ 6/30/2011	2011 Year End Forecast	2011 Budget 10/1/2010	2011 Year End Forecast vs Budget
C&LM Programs:				
Residential Programs				
HES Income Eligible	$664	$1,795	$930	$865
Home Energy Solutions	781	1,777	1,600	177
Residential New Construction	88	680	500	180
Water Heating	29	122	137	(15)
Total Residential	**$1,562**	**$4,374**	**$3,167**	**$1,207**
Commercial & Industrial				
Energy Conscious Blueprint	$973	$1,472	$1,480	($8)
Energy Opportunities	390	1,393	1,020	373
O&M	2	74	200	(126)
Total Commercial & Industrial	**$1,365**	**$2,939**	**$2,700**	**$239**
Other - Programs/Requirements				
CHIF Loan Fund	$0	$50	$50	$0
Residential Financing Subsidies	0	45	90	(45)
C&I Financing Subsidies	0	25	50	(25)
Total Education/Other	**$0**	**$120**	**$190**	**($70)**
Other Expenditures				
Information Technology	$0	$35	$35	$0
Planning	21	37	59	(22)
Evaluation	15	234	234	0
Energy Efficiency Board (EEB)	(0)	15	16	(1)
Total Other Expenditures	**$36**	**$321**	**$344**	**($23)**
Total	**$2,963**	**$7,754**	**$6,401**	**$1,353**

Note 1 - 2011 Budget does not reflect July 2011 PURA approval of $1.2 million increased funding for YGS Residential programs.

CNG
Docket No. 10-10-03
Order No. 26i

2011 Program Expenditures Forecast (000s)

	2011 YTD Actual Expenses @ 6/30/2011	2011 Year End Forecast	2011 Budget 10/1/2010	2011 Year End Forecast vs Budget
C&LM Programs:				
Residential Programs				
HES Income Eligible	$319	$1,177	$826	$351
Home Energy Solutions	1,150	2,182	1,500	682
Residential New Construction	233	362	350	12
Water Heating	41	102	105	(3)
Total Residential	**$1,743**	**$3,823**	**$2,781**	**$1,042**
Commercial & Industrial				
Energy Conscious Blueprint	$179	1,140	1,140	($0)
Energy Opportunities	57	760	760	0
O&M	6	128	100	28
Total Commercial & Industrial	**$242**	**$2,028**	**$2,000**	**$28**
Other - Programs/Requirements				
CHIF Loan Fund	$0	50	50	$0
Residential Financing Subsidies	0	45	90	(45)
C&I Financing Subsidies	0	25	50	(25)
Total Education/Other	**$0**	**$120**	**$190**	**-$70**
Other Expenditures				
Information Technology	$0	30	30	$0
Planning	16	51	51	0
Evaluation	3	208	208	0
Energy Efficiency Board (EEB)	7	17	17	0
Total Other Expenditures	**$26**	**$306**	**$306**	**$0**
Total	**$2,011**	**$6,277**	**$5,277**	**$1,000**

Note 1 - 2011 Budget does not reflect July 2011 PURA approval of $1.0 million increased funding for CNG Residential programs.

SCG
Docket No. 10-10-03
Order No. 26i

2011 Program Expenditures Forecast (000s)

	2011 YTD Actual Expenses @ 6/30/2011	2011 Year End Forecast	2011 Budget 10/1/2010	2011 Year End Forecast vs Budget
C&LM Programs:				
Residential Programs				
HES Income Eligible	$934	$1,823	$926	$897
Home Energy Solutions	632	1,685	1,500	185
Residential New Construction	200	245	300	(55)
Water Heating	36	94	121	(27)
Total Residential	**$1,802**	**$3,847**	**$2,847**	**$1,000**
Commercial & Industrial				
Energy Conscious Blueprint	$469	$1,050	$1,050	$0
Energy Opportunities	297	1,261	700	561
O&M	124	124	100	24
Total Commercial & Industrial	**$889**	**$2,435**	**$1,850**	**$585**
Other - Programs/Requirements				
CHIF Loan Fund	$0	$50	$50	$0
Residential Financing Subsidies	0	45	90	(45)
C&I Financing Subsidies	0	25	50	(25)
Total Education/Other	**$0**	**$120**	**$190**	**($70)**
Other Expenditures				
Information Technology	$0	$15	$30	($15)
Planning	15	51	51	0
Evaluation	1	208	208	0
Energy Efficiency Board (EEB)	7	17	17	0
Total Other Expenditures	**$23**	**$291**	**$306**	**($15)**
Total	**$2,714**	**$6,694**	**$5,193**	**$1,501**

Note 1 - 2011 Budget does not reflect SCG request of PURA approval of $350K increased funding for SCG Residential programs.

27. HES and Limited Income Programs shall continue to be tracked and evaluated separately.

As directed by this Order, CL&P continues to track and evaluate HES and HES-IE programs separately.

UI filed a letter with PURA dated March 1, 2011, in compliance with this Order.

Orders - Docket No. 10-10-04

1. Once finalized, the EDCs and LDCs shall submit to the Department the effective unit rate caps and publish these on their respective websites.

The EDC's and LDC's filed a joint letter with the Authority on December 21, 2010 which lists the C&I program unit incentive caps. CL&P and Yankee published these rates on their respective websites on February 1, 2011.

The Companies filed a letter with PURA dated March 1, 2011 in compliance with this Order.

2. The LDCs shall comply with the directives regarding conservation program evaluations as stated in the Decision in Docket No. 10-10-03, DPUC Review of The Connecticut Energy Efficiency Fund's Conservation and Load Management Plan for 2011.

Yankee filed a letter with PURA dated February 25, 2011 in compliance with this Order.
CNG and SCG filed a letter with PURA dated March 1, 2011in compliance with this Order.

3. Effective January 1, 2011, the LDCs shall require a $75 co-payment from all customers participating in HES. Based on program demand, program administrators may modify the co-payment intra-year from a minimum of $25 to a maximum of $100.

The LDC's filed a letter with PURA dated March 1, 2011 in compliance with this Order.

4. No later than January 14, 2011, the LDCs shall provide the Department with an updated 10-year forecast summary of energy and peak-day demand and the costs of supply side options it is considering for the next 10 years.

On January 26, 2011, the LDCs made a joint filing in compliance with Order No. 4. On May 2, 2011, the Department issued a letter finding the LDCs' 10-year forecast and the source for their commodity cost estimates to be reasonable. However, the Department requested supplemental supply-side information. On May 20, 2011, the LDCs jointly submitted a filing in compliance with the Department's May 2, 2011 request.

5. No later than March 1, 2011, the LDCs shall provide a forecast of demand, supply options and demand reduction goals as discussed in more detail in Section II.A.3. Program Goals and outlined in

Attachment 1 along with a request for a technical meeting to discuss its integrated resource planning strategy for the next annual conservation filing.

The LDC's filed a letter with PURA on March 8, 2011 in compliance with this Order.

6. No later than March 1, 2011, the LDCs shall develop an attic insulation rebates appropriate for inclusion in the 2011 Plan as discussed in Section II.A.2. Home Energy Solutions.

The LDCs filed letters with PURA dated March 1, 2011in compliance with this Order.

7. On or before September 1, 2011, and annually thereafter, the LDCs shall submit a proposed annual conservation plan and budget to the Department for review.

PURA, in their letter dated August 30, 2011, granted an extension to file the 2012 C&LM Plan on October 1, 2011.at the request of the EEB.

8. No later than January 1, 2012, the LDCs shall incorporate gas measures directly through the SBEA program, and begin to offer on-bill financing for qualifying gas measures, beginning in January 2012 as discussed in Section II.B. Commercial and Industrial Programs.

As part of their 2012 C&LM Plan filed on October 1, 2011, the LDC's and EDC's have incorporated gas measures directly through the SBEA program and will begin to offer on-bill financing for qualifying gas measures beginning January 2012.

Order – Docket No. 09-10-03

15i. Provide a summary of Wise Use calls as part of the C&LM Plan Standard Filing Requirement as discussed for the EDCs in Section II.G.9., herein;

The following table from CL&P provides a summary of Wise Use calls as ordered.

2011 Wise Use Energy Calls - CL&P

2011	Alternate Suppliers	CCEF	"Green"	HES	Commercial	Industrial	SBEA	Smart Liv Center	State	HES-IE	MONTHLY TALLY
January	33	0	2	1028	152	3	115	0	3	897	2233
February	31	0	2	927	144	1	111	0	2	660	1878
March	25	0	3	846	167	0	130	0	2	598	1771
April	28	0	0	650	144	3	89	0	1	661	1576
May	37	0	6	586	136	0	63	0	2	732	1562
June	24	0	3	613	137	0	47	0	3	596	1423
July	16	0	3	649	162	5	44	0	1	393	1273
August	26	0	0	960	139	0	39	0	7	732	1903
September	22	0	0	903	120	0	45	0	5	654	1749
October	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0
Total	242	0	19	7162	1301	12	683	0	26	5923	15368

Note Calls reflect Wise use and Wrap Line calls combined.

The following table from UI provides a summary of Wise Use calls as ordered.

2011 Wise Use Energy Calls - United Illuminating											
2011	Alternate Suppliers	CCEF	"Green"	HES	Other Res.	Other	SBEA	Smart Liv Center	Technical	HES-IE	MONTHLY TALLY
January	27	0	4	377	46	10	3	1	2	333	803
February	23	0	2	405	86	12	7	2	7	213	757
March	12	0	4	368	74	38	10	4	2	228	740
April	14	0	3	202	90	24	4	3	0	277	617
May	22	0	0	184	101	17	4	2	0	337	667
June	15	0	1	250	123	11	14	0	0	236	650
July	12	1	0	236	119	14	18	1	0	260	661
August	20	0	0	216	86	15	7	1	0	349	694
September (wk ending 9/23)	5	0	0	163	51	13	6	0	0	291	529
October	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0
Total	150	1	14	2401	776	154	73	14	11	2524	6118

CL&P Specific Issues:

CL&P currently provides separate quarterly filings to the Public Utilities Regulatory Authority ("PURA" or "Authority") for each of the following orders in their respective dockets:

1. 99-09-30: Order No. 8 - Requires CL&P to submit a quarterly report on the status of conservation program participation (C&LM's Quarterly Performance Report)

2. 07-10-03RE01: Order No. 1 - CL&P and UI shall develop reports and communicate budgets, goals and actual expenditures with program vendors on a regular basis throughout the year as discussed herein.

3. 07-10-03RE01: Order No. 8 - Effective the first quarter of 2009, CL&P and UI shall file quarterly reports to the ECMB and the [Authority] regarding C&LM actual expenditures, commitments and offers to date, comparing such figures to the [Authority] -authorized budget. The quarterly filings should be submitted as compliance filings in the annual docket in which each quarter's budget is approved.

4. 05-07-19: Order No. 4 - During the PURA's hearings in this docket, the Companies were asked to provide on a quarterly basis the amount of Class III Renewable Energy Credits (RECs) generated as well as the amount of REC sales transferred to the C&LM fund. CL&P uses Order No. 4 for the purposes of providing this information to the PURA. The quarterly report is due within 45 days from the close of each quarter.

5. 10-10-03RE01: Order No. 3 - On or before September 7, 2011, and quarterly thereafter for one year, CL&P shall provide the [Authority] an update on its progress regarding this lending program. The update shall include, but not be limited to, the development of a contractor network, transfer of loan origination and marketing services to CHIF, establishment of on-bill payment features, the dollar value and number of loans originated, interest rates thereto, and loan losses.

CL&P will continue to provide the information required for each of the orders listed above, however we respectfully request that PURA issue an Order that would consolidate the four quarterly order filings and

CL&P will submit it as one filing on a quarterly basis in the annual C&LM docket approved by PURA. CL&P requests a due date of forty-five days from the end of the quarter.

CL&P suggests that a review by PURA of the quarterly filings provided in the requested integrated format would achieve the following:

- Increase the understanding of the integrated information being provided
- Decrease any potential inefficiencies or misunderstandings that might result from multiple separate filings
- Result in a more efficient review process

CL&P Standard Filing Requirement

2011 Carrying Charges Summary

	@ 12/31/10	Jan	Feb	Q1 March
Monthly C&LM Balance	$ (35,672,748)	$ (36,790,716)	$ (36,840,250)	$ (36,176,803)

		March
Average C&LM Balance		$ (35,924,776)
Accumulated Deferred Income Tax	*40.36250%*	$ (14,500,138)
Net Balance		$ (21,424,638)
Quarterly Rate of Return *		2.7225%
Total First Quarter Carrying Charges		**$ (583,286)**

	Apr	May	Q2 June
Monthly C&LM Balance	$ (35,676,065)	$ (34,777,336)	$ (28,522,503)

Average C&LM Balance		$ (32,349,653)
Accumulated Deferred Income Tax	*40.36250%*	$ (13,057,129)
Net Balance		$ (19,292,524)
Quarterly Rate of Return *		2.7225%
Total Second Quarter Carrying Charges		**$ (525,239)**

	Jul	Aug	Estimate Q3 September
Monthly C&LM Balance	$ (29,696,060)	$ (27,061,313)	$ (24,426,566)

Average C&LM Balance		$ (26,474,534)
Accumulated Deferred Income Tax	*40.36250%*	$ (10,685,784)
Net Balance		$ (15,788,751)
Quarterly Rate of Return *		2.7225%
Total Third Quarter Carrying Charges		**$ (429,849)**

	Estimate Oct	Estimate Nov	Estimate Q4 December
	(21,291,819.00)	(17,657,072.00)	(12,431,325.00)
Monthly C&LM Balance			

Average C&LM Balance		$ (18,428,946)
Accumulated Deferred Income Tax	*40.36250%*	$ (7,438,383)
Net Balance		$ (10,990,562)
Quarterly Rate of Return *		2.7225%
Total Fourth Quarter Carrying Charges		**$ (299,218)**

Total Year End Estimated Carrying Charges	**$ (1,837,592)**

*10.89% annual pretax ROR per Docket 09-12-05

Estimate Assumptions

1. 2011 C&LM total spending estimated to be $108.2 M

UI Interest Calculation on CLM Fund Balance

		C&LM Fund Cumulative Balance	C&LM Fund Cumulative Running Balance Tax Affected	Interest Rate*	Interest
2003:	January	1,191,353.70		11.80%	5,857.49
	February	1,966,095.23		11.80%	15,524.12
	March	477,736.93		11.80%	12,015.51
	April	213,267.88		11.80%	3,397.44
	May	1,110,772.48		11.80%	6,509.87
	June	2,017,969.99		11.80%	15,382.98
	July	3,461,910.70		1.01%	2,306.12
	August	4,014,197.79		1.03%	3,208.50
	September	5,002,054.66		1.00%	3,756.77
	October	5,850,089.75		1.00%	4,521.73
	November	6,953,660.45		1.01%	5,388.24
	December	6,806,709.58		1.03%	5,905.49
2004:	January	7,102,899.99		1.02%	5,911.58
	February	8,046,215.43		1.00%	6,312.13
	March	8,579,925.73		0.98%	6,789.01
	April	9,341,573.83		0.97%	7,243.27
	May	9,736,065.39		0.97%	7,710.55
	June	9,720,913.51		11.84%	95,987.76
	July	9,876,524.00		11.84%	96,680.69
	August	9,593,191.36		11.84%	96,050.60
	September	8,993,746.72		11.84%	91,695.56
	October	7,569,826.49		11.84%	81,713.63
	November	7,352,918.65		11.84%	73,618.88
	December	7,115,053.17		11.84%	71,375.33
2005:	January	7,116,627.65		11.67%	69,201.55
	February	7,130,686.17		11.67%	69,277.56
	March	7,125,904.06		11.67%	69,322.67
	April	7,011,488.36		11.67%	68,743.07
	May	6,835,084.77		11.67%	67,328.96
	June	6,571,986.52		11.67%	65,191.88
	July	6,345,178.61		11.67%	62,809.72
	August	5,947,163.03		11.67%	59,771.51
	September	5,688,023.32		11.67%	56,576.09
	October	5,086,020.06		11.67%	52,388.79
	November	4,299,404.43		11.67%	45,636.63
	December	960,217.68		11.67%	25,574.91
2006:	January	1,288,154.13	664,955.96	10.17%	5,635.50
	February	1,466,966.34	814,826.88	10.17%	6,905.66
		Transfer to NBFMCC			(20,461.90)
	March	1,362,194.27	836,724.25	10.17%	7,091.24
		Transfer to NBFMCC			(37,736.28)
	April	1,485,963.48	842,342.65	10.17%	7,138.85
		Transfer to NBFMCC			(942,214.30)
	May	1,208,566.42	796,907.22	10.17%	6,753.79
		Transfer to NBFMCC			(299,587.52)
	June	1,091,682.47	680,298.61	10.17%	5,765.53
	July	1,255,015.72	694,035.99	10.17%	5,881.96
	August	1,185,922.47	721,907.47	10.17%	6,118.17
	September	1,310,766.76	738,395.84	10.17%	6,257.90
	October	1,259,440.80	760,138.89	10.17%	6,442.18
		Interest Transfer to C&LM Fund			(136,686.58)
	November	(713,314.11)	161,516.97	10.17%	1,368.86
	December	(887,516.85)	(473,445.76)	10.17%	(4,012.45)
2007:	January	(990,595.87)	(564,607.64)	9.99%	(4,700.36)
	February	(1,116,626.57)	(633,483.75)	9.99%	(5,273.75)
	March	(2,456,558.06)	(1,074,188.63)	9.99%	(8,942.62)
	April	(3,639,310.60)	(1,832,570.52)	9.99%	(15,256.15)
	May	(2,167,778.45)	(1,745,756.15)	9.99%	(14,533.42)
	June	(1,817,186.68)	(1,197,980.14)	9.99%	(9,973.18)
	July	(3,407,008.01)	(1,570,523.53)	9.99%	(13,074.61)
	August	(4,452,790.57)	(2,362,851.95)	9.99%	(19,670.74)
	September	(5,752,725.97)	(3,068,033.41)	9.99%	(25,541.38)
	October	(5,074,372.04)	(3,254,896.34)	9.99%	(27,097.01)
	November	(4,593,462.24)	(2,906,392.68)	9.99%	(24,195.72)
	December	(4,606,244.51)	(2,765,661.84)	9.99%	(23,024.13)
2008:	January	(5,208,676.21)	(2,950,610.54)	10.20%	(25,080.19)
	February	(4,836,177.24)	(3,019,734.07)	10.20%	(25,667.74)
	March	(5,643,232.38)	(3,150,372.52)	10.20%	(26,778.17)
	April	(6,487,358.62)	(3,646,758.92)	10.20%	(30,997.45)
	May	(6,312,873.20)	(3,848,069.69)	10.20%	(32,708.59)
	June	(3,320,028.89)	(2,895,891.19)	10.20%	(24,615.08)
	July	(3,090,646.66)	(1,927,209.34)	10.20%	(16,381.28)
	August	(1,601,137.80)	(1,410,467.70)	10.20%	(11,988.98)
	September	(1,776,219.28)	(1,015,317.97)	10.20%	(8,630.20)
	October	(1,936,386.59)	(1,116,102.14)	10.20%	(9,486.87)
	November	(214,250.76)	(646,535.35)	10.20%	(5,495.55)
	December	185,574.37	(8,620.84)	10.20%	(73.28)
		Interest Transfer from C&LM Fund			347,839.25
	December Final	(162,264.88)			
2009:	January	25,666.44	(41,064.91)	10.56%	(361.37)
	February	88,143.65	34,214.16	10.56%	301.08
	March	3,491,950.15	1,076,265.70	10.56%	9,471.14
	April	3,133,529.88	1,991,784.93	10.56%	17,527.71
	May	5,356,535.00	2,552,325.75	10.56%	22,460.47
	June	5,727,161.02	3,332,036.12	10.56%	29,321.92
	July	5,411,114.33	3,348,444.03	10.56%	29,466.31
	August	6,574,463.27	3,603,164.27	10.56%	31,707.85
	September	5,435,069.74	3,610,365.86	10.56%	31,771.22
	October	4,319,441.73	2,932,450.01	10.56%	25,805.56
	November	3,523,193.89	2,357,692.33	10.56%	20,747.69
	December	5,887,200.17	2,828,999.71	10.56%	24,731.32
2010:	January	5,192,881.40	3,303,914.12	10.70%	29,459.90
	February	3,511,609.45	2,595,548.60	10.70%	23,143.64
	March	4,325,256.57	2,336,835.89	10.70%	20,836.79
	April	4,102,814.37	2,513,124.33	10.70%	22,408.69
	May	2,257,785.99	1,896,635.62	10.70%	16,911.67
	June	1,723,458.56	1,187,147.41	10.70%	10,585.40
	July	1,307,009.80	903,640.21	10.70%	8,057.46
	August	1,763,201.58	915,490.98	10.70%	8,163.13
	September	2,497,835.26	1,270,577.27	10.70%	11,329.31
	October	3,289,425.82	1,725,674.45	10.70%	15,387.26
	November	1,515,012.74	1,432,611.51	10.70%	12,774.12
	December	1,756,049.04	975,381.56	10.70%	8,697.15
		Interest Transfer to C&LM Fund			(430,705.39)
2011:	January	2,186,645.20	1,175,652.28	10.72%	10,502.49
	February	2,380,926.57	1,361,981.39	10.72%	12,167.03
	March	2,369,960.25	1,416,643.19	10.72%	12,655.35
	April	589,333.41	882,416.98	10.72%	7,882.93
	May	(2,021,948.57)	(427,184.35)	10.72%	(3,816.18)
	June	(1,688,030.55)	(1,106,260.12)	10.72%	(9,882.59)
TOTAL					29,509.03

*Period January 1, 2003 - June 30, 2003 - pre-tax allowed weighted cost of capital
Period July 1, 2003 - May 31, 2004 - short-term borrowing interest rate
(Weighted Average Temporary Cash Investments in Money Market Fund)
Period June 1, 2004 forward - pre-tax allowed weighted cost of capital

EXHIBIT IV: PERFORMANCE INCENTIVE MATRIX

THE CONNECTICUT LIGHT AND POWER COMPANY

2012 Management Incentive Performance Indicators and Incentive Matrix

CL&P and the EEB recognize that having clear indicators and metrics of performance are helpful in delivering quality programs to Connecticut consumers. The following is a table of performance and incentive metrics developed by the utilities with input from the EEB, the Board consultants and the Department. These performance and incentive metrics apply to the programs delineated in this Plan. The projected CL&P Performance Incentive is **$3,982,940** and is based on achieving **100%** of all performance targets and earning an incentive of **5%** of the total C&LM program budget of **$79,658,809** as shown on Table A (exclusive of Energy Efficiency Board costs, management incentives and audit costs). The actual earned amount will be calculated on a sliding scale based on the percent of goal achieved and the actual total expenditures, based on the following performance range:

-Performance Incentive Illustration-

Performance % Minimum	Pretax Incentive	Pre-tax Incentive
70	2%	$1,593,176
80	3%	$2,389,764
90	4%	$3,186,352
100	**5%**	**$3,982,940**
110	6%	$4,779,529
120	7%	$5,576,117
130	8%	$6,372,705
Maximum		
Incentive Basis Budget	$79,658,809	

Goals will be prorated based on actual over/under spend of budget in the event actual spending is over/under 5% of budget.

SECTOR Program		Performance Indicators				Incentive Metrics			
						Incentive Metric	Target Goal	Weight	Incentive
RESIDENTIAL									
		Program Name	**LT-kWh**	**kW**	**% (1)**				
Residential Programs (Sector Level) Sector Budget	**$27,268**	Retail Products	214,581,337	3,271	35.7%	Sum of Electric System Benefit from Residential programs	Electric System Benefit from Residential programs **$46,977**	0.1650	**$716,929**
		New Construction	29,900,570	356	4.8%				
		HES	259,148,882	2,631	41.3%				
		HES Income Eligible	116,400,232	929	18.2%				
		Total	620,031,021	7,187					
		Savings Rate	$ 0.06820 / kWh	$ 652.90 / kW					
		Savings	$ 42,285	$ 4,692					
		(1) percent of target goal							
Net Electric System Benefit - Res.		Electric System Benefit less Program Costs			$19,709		**$19,709**	0.1650	**$716,929**
Home Energy Solutions	**$11,757**	Electric Savings LTkWh :		259,148,882		Energy Savings included in appropriate sector level metric			
		Demand Savings kw :		2,631					
		Increase average HES Participant savings by 20% for all fuels				Increase average HES savings by 20%	Achieve 20% average increase in HES per participant savings across all fuels	0.0800	**$318,635**
		For 10% of HES participants achieve 25% overall reduction in total energy savings; based on the average energy usage of HES participants				Achieve deep savings of 25%	Achieve minimum savings of 25% across all fuels in 10% of HES participants	0.0400	**$159,318**
EE Communities	**$1,000**	HES Coordination with community tasks forces and vendors to bring in more HES Projects (projects completed from outside of the utilities)				Increase customer participation			
Residential New Construction	**$1,261**	Electric Savings LTkWh :		29,900,570		Energy Savings included in appropriate sector level metric			
		Demand Savings kw :		356					
HES Income Eligible	**$9,400**	Electric Savings LTkWh :		116,400,232		Energy savings included in appropriate sector level metric			
		Demand Savings kW :		929					
		Fully expend 2012 HES-IE Budget. This is a penalty metric. Companies must expend at least 88% of budget to avoid the penalty. Above 88% the penalty is scaled with a 10% reduction in the penalty for each one percent increase in budget spent above 88%; Expending 98% will avoid the penalty. The budget will be adjusted and pro-rated based on final year-end spending, net of ARRA spending impacts. The EEB acknowledges the high priority for the spending of any remaining ARRA federal stimulus monies through March 2012 and the important support and resources the Companies are dedicating to that effort. Any under-expended HES-IE funding from 2012 will be carry forward to 2013, which would be in addition to the parity-level of HES-IE funding in 2013.				Fully expend 2012 HES-IE Budget	The penalty below 88% is -.05	0	**$0**
		Alignment of HES and HES-IE BPI Certfications One person in each crew with both BPI Building Analyst 1 and Envelop Specialist certifications by 6/30/12. By 9/30/12 each crew will have received training and be able to provide duct sealing services as per HES guidelines. Each crew will have the necessary testing and diagnostic equipment to perform duct sealing.				HES-IE Crew member Certifications and Duct Sealing Training	1 member of each crew certified by June 30, 2012 Duct Sealing Training and able/equipped by 9/30/12	0.03	**$119,488**
Retail Products	**$4,850**	Electric Savings LTkWh :		214,581,337		Energy savings included in appropriate sector level metric			
		Demand Savings kW :		3,271					

SECTOR Program		Performance Indicators				Incentive Metrics			
						Incentive Metric	Target Goal	Weight	Incentive
COMMERCIAL & INDUSTRIAL (C&I)									
		Program Name	**LT-kWh**	**kW**	**% (1)**				
C&I Programs (Sector Level) Sector Budget	**$38,041**	Energy Conscious Blueprint	307,731,964	4,375	23.4%	Total Electric System Benefit from C&I programs	Electric System Benefit from C&I programs **$106,651**	0.2100	**$836,417**
		Energy Opportunities	521,131,463	6,027	38.5%				
		O&M	144,420,641	2,349	11.3%				
		PRIME	9,479,141	-	0.6%				
		Small Business	344,348,911	4,828	26.2%				
		Total	1,327,112,120	17,579					
		Savings Rate	$ 0.06815 / kWh	$ 921.89 / kW					
		Savings	$ 90,446	$ 16,206					
		(1) percent of target goal							
Net Electric System Benefit- C&I		Electric System Benefit less Program Costs			$68,611		**$68,611**	0.2100	**$836,417**
C&I Market Segmentation		The Companies will develop a plan which includes a protocol for defining market penetration and segmentation and establishing long term goals in collaboration with the EEB (EO and SBEA)							
Energy Opportunities	**$13,242**	1) Percentage of EO signed projects that incorporate performance contracting (and/or 3rd Party Financing, including utility capital)					**10%** of the signed projects will incorporate performance contracting (and/or 3rd Party Financing, including utility capital)	0.0200	**$79,659**
		2) Percentage of signed projects participating in the Comprehensive Initiative receiving comprehensive incentive					**12%** of the signed projects will be comprehensive projects	0.0200	**$79,659**
Energy Conscious Blueprint	**$8,503**	1) Number of new construction/major renovation projects that exceed the new construction State Energy Code baseline by at least 30 % or follow the whole building performance track. 2) The companies will develop a plan to transition into IECC 2012 (ASHRAE 2010) in collaboration with the EEB: a) Awareness: Prepare the market by working with the A/E community, the trade communities; specifiers and inspectors b) Develop and deliver a series of code training sessions for the A/E and trade C) Develop and deliver a series of training sessions on a variety of subjects relating to Integrated Design and High Performance Buildings (including Net Zero buildings) and code					**30%** of signed contracts exceed code or are whole building performance track project	0.020	**$79,659**
Small Business	**$11,640**	Electric Saving LTkWh : 344,348,911 Demand Saving kW : 4,828 Percentage of projects participating in the "Comprehensive" Initiative. (i.e., 2 or more end uses) receiving comprehensive performance incentive				Energy savings included in appropriate sector level metric	**10%** of the signed projects will be comprehensive projects	0.02	**$79,659**
O&M / RCx	**$4,171**	1) The Companies will develop and promote a Sustainable Energy Management Plan and Guide which includes benchmarking, the use of dashboards, and an implementation plan including Retro-commissioning in collaboration with the EEB.					Develop the Sustainable Energy Mgmt Guide and enroll 25 customers	0.02	**$79,659**
Total of Incentives								**1.00000**	**$3,982,940**

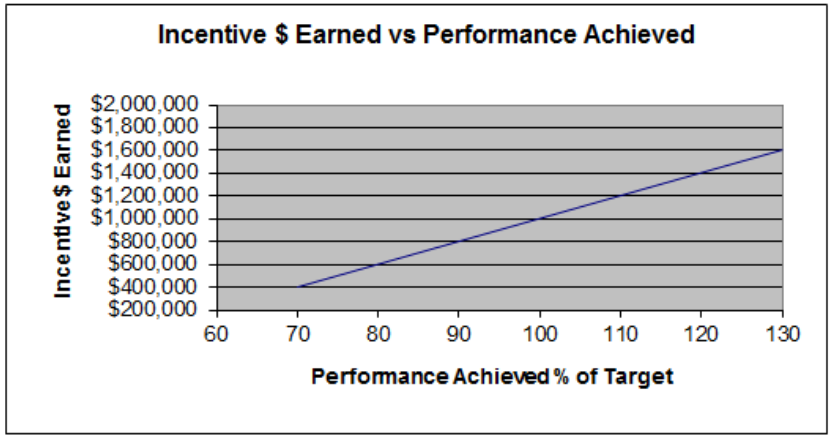
THE UNITED ILLUMINATING COMPANY

2012 Management Incentive Performance Indicators and Incentive Matrix

Provided below is the 2012 Incentive Matrix with Performance Indicators.
The weights applied to each of the individual and sector level metrics were developed in collaboration with ECMB consultants. The Utility Performance Incentive is $1,003,333 .
This calculated is based on achieving 100% of all performance targets and earning a target incentive of 5% of C&LM budgets (not including ECMB costs, Audit Costs or Management Incentive).
Goals will be prorated based on actual over/under spend of budget.
The actual incentive earned will be determined by the performance achieved in each of the Incentive Metrics identified below, based on the following Performance Index:

Performance %	Pretax Incentive	Pre-tax Incentive
70	2%	$401,333
80	3%	$602,000
90	4%	$802,667
100	5%	$1,003,333
110	6%	$1,204,000
120	7%	$1,404,667
130	8%	$1,605,333

Total Original Budget* $20,066,667



SECTOR Program		Performance Indicators		Incentive Metrics			
				Incentive Metric	Target Goal	Weight	Incentive
RESIDENTIAL							
All Residential Programs (Sector Level) Sector Budget	$ 6,332,935	Residential Products & Services Lifetime kWh	72,381,047	Total Electric System Benefit from all Res programs	Electric System Benefit from all Res programs Total Electric System Benefit: $12,381,518	0.165	$165,550
		Residential Products & Services kW	1,326				
		Homes Lifetime kWh	2,941,285				
		Homes kW	103				
		Home Energy Solutions Lifetime kWh	41,625,954				
		Home Energy Solutions kW	734				
		HES Income Eligible Lifetime kWh	40,277,158				
		HES Income Eligible kW	210				
		Total Residential Lifetime kWh	157,225,443				
		Total Residential kW	2,373				
		Present Value of Res Lifetime kWh	$0.0683				
		Present Value of Res Lifetime kW @ Customer Meter	$690.99				
		Total Res Lifetime kWh @ Present Value Factor	$10,742,077				
		Total Res kW @ Present Value Factor	$1,639,441				
		Total Electric System Benefit	$12,381,518				
		The Net Electric System Benefit from all Res programs	$6,048,584				
All Residential Programs (Sector Level)		Total Net Electric System Benefit	$6,048,584		$6,048,584	0.165	$165,550
Residential New Construction	$ 177,329			Energy savings included in appropriate sector level metric			
HES	$ 2,281,658			Energy savings included in appropriate sector level metric			
		Increase average HES Participant savings by 20% for all fuels		Increase average HES savings by 20%	Achieve 20% average increase in HES per participant savings across all fuels	0.08	$80,267
		For 10% of HES participants achieve 25% overall reduction in total energy savings; based on the average energy usage of HES participants		Achieve deep savings of 25%	Achieve minimum savings of 25% across all fuels in 10% of HES participants	0.04	$40,133
HES - Income Eligible	$ 2,118,093			Energy savings included in appropriate sector level metric			
		Fully expend 2012 HES-IE Budget. This is a penalty metric. Companies must expend at least 88% of budget to avoid penalty. Above 88% the penalty is scaled with a 10% reduction in the penalty for each one percent increase in budget spent above 88%; Expending 98% will avoid the penalty. The budget will be adjusted and pro-rated based on final year-end spending, net of ARRA impacts. The EEB acknowledges the high priority for the spending of any remaining ARRA federal stimulus monies through March 2012 and the important support and resources the Companies are dedicating to that effort. Any under-expended HES-IE funding from 2012 will be carry forward to 2013, which would be in addition to the parity-level of HES-IE funding in 2013.		Fully expend 2012 HES-IE Budget	Note: the penalty below 88% is -.05		
		Alignment of HES and HES-IE BPI Certfications. One person in each crew with both BPI Building Analyst 1 and Envelop Specialist certifications by 6/30/12. By 9/30/12 each crew will have received training and be able to provide duct sealing services as per HES guidelines. Each crew will have the necessary testing and diagnostic equipment to perform duct sealing.		HES-IE Crew member certifications and Duct Sealing Training	1 member of each crew certified by June 30, 2012. Duct Sealing Training and able/equipped by 9/30/12	0.03	$30,100
Retail Products	$ 1,755,855			Energy savings included in appropriate sector level metric			
EE Communities	$ 300,000	HES Coordination with community tasks forces and vendors to bring in more HES Projects (projects completed from outside of the utilities)		Increase customer participation			
All Other Residential Programs		Electric savings		Energy savings included in appropriate sector level metric			

SECTOR Program		Performance Indicators		Incentive Metrics			
				Incentive Metric	Target Goal	Weight	Incentive
COMMERCIAL & INDUSTRIAL (C/I)							
All C/I Programs (Sector Level) Sector Budget	$ 8,368,616	Energy Blueprint Lifetime kWh Energy Blueprint kW Energy Opportunities Lifetime kWh Energy Opportunities kW O&M (RetroCx, BOC, RFP) O&M RFP kW Small Business Lifetime kWh Small Business kW Total C&I Lifetime kWh Total C&I kW Present Value of C&I Lifetime kWh Present Value of C&I Lifetime kW @ Customer Meter Total C&I Lifetime kWh @ Present Value Factor Total C&I kW @ Present Value Factor Total Electric System Benefit The net Electric System Benefit from all C&I programs:	103,249,390 1,093 113,819,163 1,172 13,903,656 176 64,551,988 861 295,524,197 3,303 $0.0735 $1,069.45 $21,727,726 $3,531,922 $25,259,648 $16,891,032	Total Electric System Benefit from all C&I programs.	Electric System Benefit from all C&I programs Total Electric System Benefit: $25,259,648	0.21	$210,700
All C/I Programs (Sector Level) Sector Budget		Total Net Electric System Benefit from all C&I programs.	$16,891,032		Total Electric System Benefit from all C&I	0.21	$210,700
Small Business	$ 2,227,636	Electric Savings LT kWh: 64,551,988 Demand Savings kW: 860.9 1) Number of projects participating in the Comprehensive Initiative based on the agreed definition of comprehensiveness.		Energy savings included in appropriate sector level metric	**10%** signed projects will be Comprehensive.	0.02	$20,067
Energy Conscious Blueprint	$ 2,386,221	1) Number of new construction/major renovation projects that exceed the new construction State Energy Code baseline by 30% or follow the whole building performance track. 2) The Companies will develop a plan to transition into IECC 2012 (ASHRAE 2010) in collaboration with the EEB: a) Awareness: Prepare the market by working with the A/E community; the trade communities; specifiers and inspectors, b) Develop and deliver a series of code training sessions for the A/E and trade communities, c) Develop and deliver a series of training sessions on a variety of subjects relating to Integrated Design and High Performance Buildings (including Net Zero buildings) and code issues.		Plan completion for the end of 2nd Qtr. Produce awareness collateral Conduct joint training sessions with CL&P Conduct joint training sessions with CL&P	**30%** of the signed projects	0.02	$20,067
Energy Opportunities	$ 3,007,319	1) Number of projects participating in the Comprehensive Initiative based on the agreed definition of comprehensiveness. 2) Number of signed projects that incorporate performance contracting (and/or 3rd Party Financing, including utility capital).			**12%** signed projects will be Comprehensive projects **10%** signed project that incorporates performance contracting (and/or 3rd Party Financing, including utility capital)	0.02 0.02	$20,067 $20,067
Business & Energy Sustainability (formerlyO&M RFP) Includes funds for programs that may result from the public input	$ 747,439	1) The Companies will develop and promote a Sustainable Energy Management Plan and Guide which includes benchmarking, the use of dashboards, and an implementation plan including Retro-commissioning in collaboration with the EEB.			Develop the Sustainable Energy Management Guide and enroll **5** customers.	0.02	$20,067
C&I Market Segmentation		The Companies will develop a plan which includes a protocol for defining market segmentaiton and market penetration for the purposes of establishing long term goals in collaboration with the EEB (EO and SBEA).		Develop goals for inclusion for the 2013 plan			
All Other C&I Programs		Electric Savings		Electric Savings include in appropriate sector level metric			
Non-Electric Benefits		Dollar savings associated with fossil fuel savings, water savings, maintenance savings, labor savings and any other identified benefit	$500,000 in benefits				
Total Incentive $ Residential and C&I						1.0000	$1,003,333

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CONNECTICUT
ENERGY EFFICIENCY FUND

The EEB Program Evaluation Plan, 2012

October 1, 2011

Preface

The EEB Evaluation Committee is pleased to present its Evaluation Plan for the Public Utility Regulatory Authority's consideration. Also contained within its pages is the Evaluation Roadmap as ordered in the PURA's decision for Docket 10-10-03 and refined by the provisions in PA 11-80.

The Evaluation Plan is designed to provide cost effective studies of all the C&LM programs. Programs offering the most savings or the most uncertainty are expected to be evaluated most frequently. The Plan integrates gas and electric programs and takes advantage of opportunities to cooperate with others in the Northeast that offer the same types of measures as does CT.

Most importantly, the Plan provides for an independent evaluation process. It is critical that the programs be evaluated, measured, and verified in a way that provides confidence to the public at large that the savings are real and in a way that enables the Companies to use those savings estimates and other results with full confidence. There is a need to ensure both the reality and the perception of the independence and objectivity of EM&V activities.

Offered by the EEB Evaluation Committee;
Jamie Howland, Chair
Shirley Bergert
Jeffrey Gaudiosi
Richard Rodrigue
Richard Steeves

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The EEB Program Evaluation Plan, 2012

Introduction

The Companies have a long history of providing efficiency programs to Connecticut energy consumers. An integral part of creating, delivering and maintaining quality programs is performing independent evaluations of programs and the markets they serve.

In 1998 the Energy Conservation Management Board (now the Energy Efficiency Board or EEB) was formed and charged with responsibility to advise and assist the utility distribution companies in the development and implementation of comprehensive and cost-effective energy conservation and market transformation plans. Since that time, the EEB has worked closely with the Companies to ensure all evaluations are relevant, independent, cost-effective and meet the needs of program administrators and planners. In 2005, The EEB formed an Evaluation Committee to work directly with an EEB Evaluation Consultant in overseeing evaluation planning and completion. In 2009, the Department's decision in Docket No. 08-10-03 ordered the EEB's Evaluation Committee and their consultant to be independent from and totally responsible for all aspects of the evaluation process.

The EEB and the Electric and Natural Gas Companies recognize the importance of conducting thorough, timely, and independent evaluations. The various types of evaluation studies exist to support continuous improvement in program offerings and to measure the results of those programs. The audiences for evaluation are many - regulatory bodies, the regional electric system operator (ISO-New England), utility management, and program planners and administrators all need the information gained through evaluation in order to make decisions about program efficacy. Evaluation research can also provide the basis for determining program direction or focus. Evaluations can be used to increase participation and savings, reduce costs, and fine-tune procedures. The research provides intelligence to be used to expand the reach of the programs, using messages more relevant to the non-participating customers. Appropriate evaluation can provide the information that program administrators need to enhance existing cost-effective programs or to take a non-cost-effective program and reconstitute it as a successful one.

The evaluation process is a critical tool to measure energy savings, as well as other key attributes of each program, to allow optimum program design and careful management of consumer conservation funds.

Guiding Principles

All members of the EEB recognize the importance of evaluation. Program evaluation provides a vital function in assessing program results and supporting continuous improvement in program performance. Evaluation should not be used to "prove" non-performance, but rather to point to areas where improvement would strengthen an otherwise viable program. It is critical that the programs be evaluated, measured, and verified in a way that satisfies regional jurisdictional requirements, provides confidence to the public at large that the savings are real, and enables the Companies[33] to use those savings estimates and other results with full confidence. There is a need to ensure both the reality and the perception of the independence and objectivity of Evaluation, Measurement and Verification (EM&V) activities.

Program evaluations, market assessments and other studies should be performed on a statewide basis to the maximum extent possible, while enabling, to the extent necessary, results at the Company level. It is recognized that circumstances could occur where a service territory specific or non-statewide evaluation or study would be appropriate. Electric and natural gas program evaluation efforts should be fully integrated to the maximum extent possible. Because of the statewide focus of program evaluation in Connecticut, it is important to continue to coordinate program procedures, measures and data collection processes.

The EEB Evaluation Roadmap - Revised 07-2011

In accordance with the Act [PA 11-80 § 33, to be codified at Conn. Gen. Stat. § 16-245m(d)(4)] and the Final Decision in Docket 10-10-03, this revised Evaluation Roadmap is presented.

Summary

The Energy Efficiency Board (EEB) Evaluation Committee, which consists of non-utility EEB members, represents the EEB in the efficiency program evaluation process. The EEB Evaluation Committee and the EEB Evaluation Consultant are independent from the EEB Technical Consultants and the Program Administrators. The EEB Evaluation Consultant reports directly to the EEB Evaluation Committee. Absent payment through the CEEF, the Public Utilities Regulatory Authority (PURA) requires that the EEB Evaluation Consultant have no financial or business ties to CL&P, UI, Yankee, SCG, CNG, any EEB members, or any other EEB Technical Consultants who plan the efficiency programs.

[33] Whenever the terms "Company" or "Companies" are used, they should be understood to include only those Electric and Natural Gas Companies that offer the program being evaluated.

The EEB Evaluation Committee, and specifically the EEB Evaluation Consultant, will execute the following responsibilities: evaluation planning, study development, contractor selection, project initiation, project management and completion, and finalization of evaluation reports. All RFPs will be issued by the EEB Evaluation Consultant and responses will also be sent to the EEB Evaluation Consultant. The EEB members and the Program Administrators (PAs) may provide initial insights into the scope of work, review proposals that have been submitted, and may submit preferences for contractor selection, but final decisions rest with the EEB Evaluation Consultant, with the advisement of the Evaluation Committee. The Program Administrators review the final work products conducted and provided by third party evaluators and may provide comments on the final Draft report in writing. After completion of the report, the Evaluation Consultant, through the EEB Executive Secretary, files the evaluation report with the board and with the PURA in its most recent uncontested proceeding and the Board will post a copy of each report on its Internet web site. The Board and its members, including electric distribution and gas Program Administrator representatives, may file written comments regarding any evaluation with the PURA or for posting on the Board's Internet web site within 30 days of receipt of the report. The Program Administrators may also file written exceptions with the PURA. In addition, the Program Administrators must file with the PURA a description of how the results and recommendations will be implemented.

The Evaluation Committee may add to, reduce or alter the roles of the Evaluation Consultant and/or the Companies at its discretion at any time so long as those changes comport with the requirements of the Act and the Decision above or subsequent.

The EEB Evaluation Consultant communicates and coordinates with the EEB Evaluation Committee, and then with interested EEB members, the Companies, and the public through scheduled Committee meetings and retention of documents as described herein. These communications continue throughout the course of all evaluation activities. The EEB Evaluation Consultant schedules and coordinates all stages of the evaluation process to address the research and design concerns of the EEB Evaluation Committee and, as appropriate, the Companies to assure the highest quality of studies and the best allocation of ratepayer dollars among the studies.

The EEB revised program evaluation roadmap is independent and transparent, with the EE Evaluation Consultant communicating progress through the scheduled events of the EEB Evaluation Committee. Through the EEB Executive Secretary, the EEB Evaluation Consultant posts all EEB Evaluation Committee meeting dates and conference calls in a way that allows all interested EEB members and members of the public to attend events, participate in calls, and provide input as appropriate.

Evaluation Process

The EEB Evaluation Committee and the EEB Evaluation Consultant lead the conduct and performance of the evaluation process. While the Companies no longer hold a primary role in evaluation, their role is still vital to the success of the programs. Program administrators are in a strong position to identify aspects of their programs (savings, market, process) that would benefit from evaluation activities. The Program administrators have intimate knowledge of program procedures and program data collection that are necessary to evaluation. Moreover, the Program Administrators have a strong interest in ensuring program improvements.

Evaluation Planning

With consultation and input from the EEB Technical Consultants and the Program Administrators, the EEB Evaluation Consultant determines which evaluations might be done, sets priorities, and establishes the evaluation budget in line with those priorities. Program and measure evaluation, measurement and verification shall be conducted on an ongoing basis, with emphasis on impact and process evaluations, programs or measures that have not been studied, and those that account for a relatively high percentage of program spending. These plans and budget are approved by the EEB Evaluation Committee. The EEB Evaluation Committee will present the proposed evaluation plan to the PURA after budgetary approval by the Board. Voting members of the Board determine the budget for evaluation, which will be included in the Annual Plan filed with the PURA. The electric distribution and gas Program Administrator representatives and the representative of a municipal electric energy cooperative may not vote on board plans, budgets, recommendations, actions or decisions regarding such factors or on program evaluations and their implementation. The Evaluation Consultant:

- Provides Evaluation Committee with a package of programs evaluations, priorities and costs;
- When the evaluation plan is approved by the EEB Evaluation Committee, establishes resulting budget to submit to the full EEB for vote;
- Writes Evaluation Report to be filed at the time of the Companies' Annual Plan;
- Revises the plan periodically to reflect changes in opportunity, circumstances, remaining budget or other considerations.

The Companies, separately and together, provide important programmatic information that helps ensure that needed information on evaluation issues, program structure, and ex ante estimates are available to the Evaluation Consultant in a timely manner.

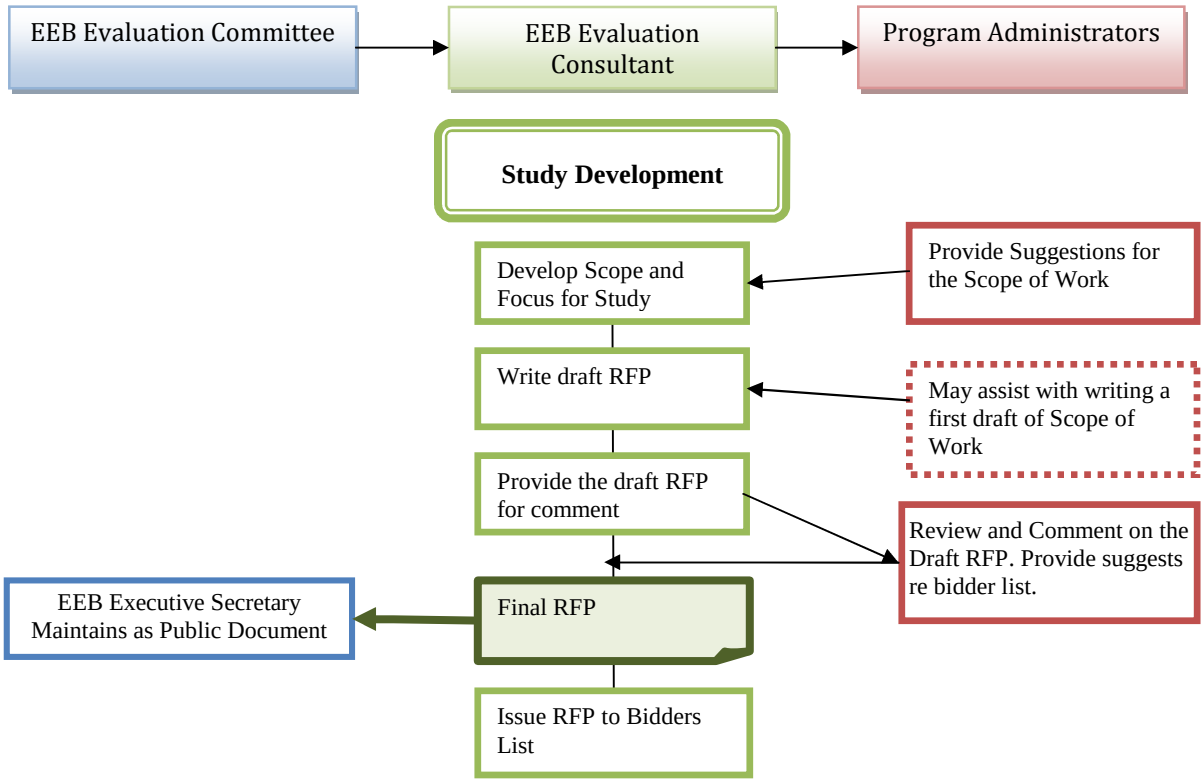
For evaluation planning, the Companies and the EEB Technical Consultants provide the EEB Evaluation Consultant with:

- Lists of studies each entity would like to be included in the evaluation plan;
- Suggested priorities for those studies that consider both the need for the information and availability of funds;
- Budgets that are sufficient to support the final plan as determined by the EEB Evaluation Committee and approved by the EEB;

Study Development

In the study development phase, the EEB Evaluation Consultant, the EEB Technical Consultants and the Companies develop the Scope of Work for the particular study to be undertaken. The Program Administrators and EEB Technical Consultants provide the EEB Evaluation Consultant with suggested issues to be included in the scope and focus of the RFP. The Evaluation Consultant finalizes the RFP after review and written comment by the Companies and Technical Consultants. After the initial scoping process, the Evaluation Consultant requests suggestions for bidders to be included in the issuance. The Companies may also suggest that inclusion of some contractors may be inadvisable, providing reasons for those beliefs. The RFPs explicitly identify the EEB Evaluation Committee as the entity requesting proposals and the EEB evaluation consultant, who works on behalf of the EEB, as the sole contact for additional information and for receipt of the proposals. See Figure 1.

Figure 1: Study Development Process

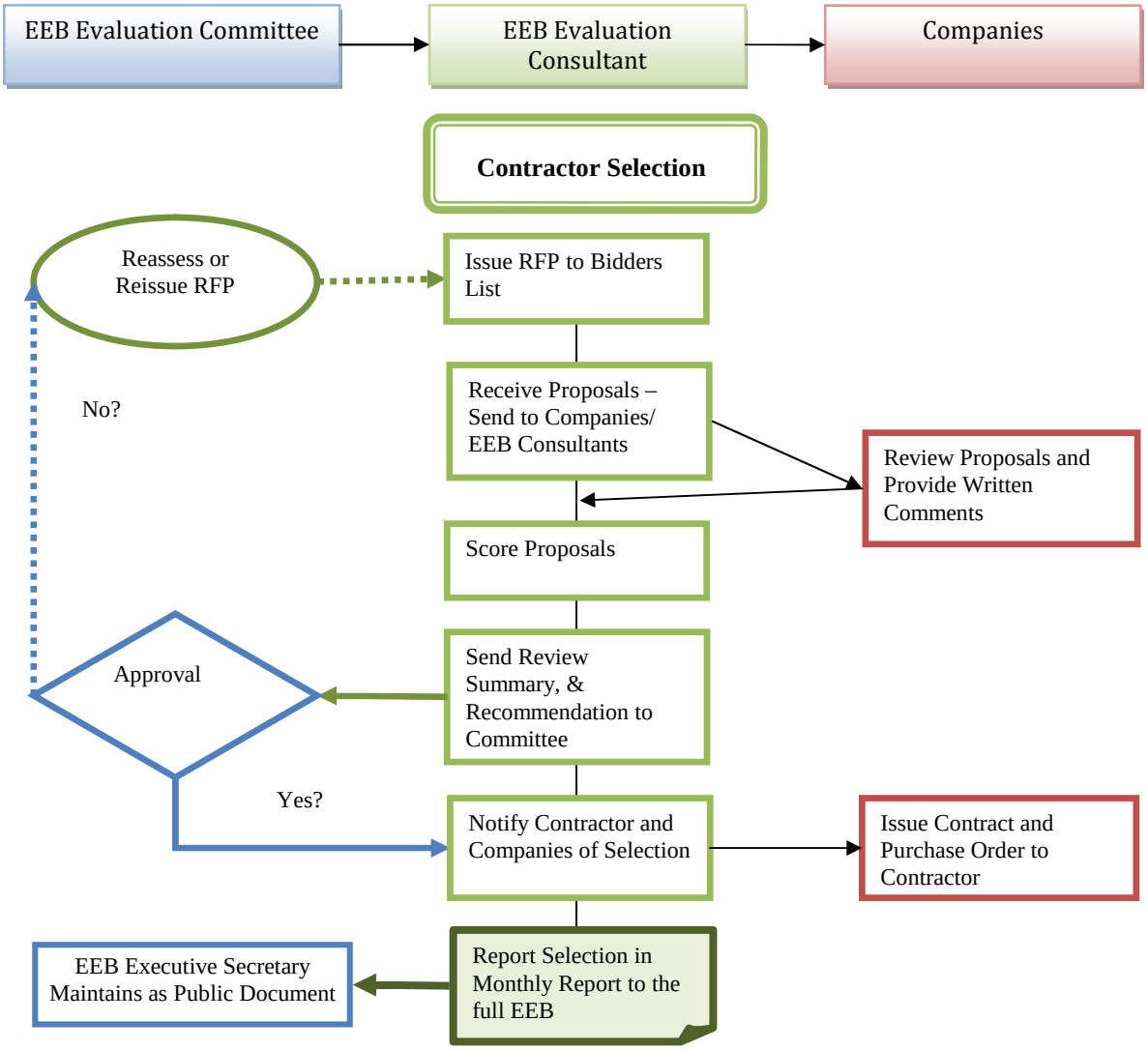


Contractor Selection Process

It is especially important the selection of 3rd party contractors be transparent. The EEB process (Figure 2) for selection of an evaluation contractor is:

- The EEB Evaluation Consultant develops the scope of work with input and assistance from appropriate Program Administrator staff and EEB Technical Consultants. The EEB Evaluation Consultant develops the RFP and includes information for and instructions to contractors on procedures for conducting the evaluation. The Companies provide their Terms and Conditions documents for inclusion in the RFP.
- The EEB Evaluation Committee releases the RFP.
- Contractor proposals are submitted directly to the EEB Evaluation Consultant. The Evaluation Consultant and EEB Executive Secretary then provide proposals to EEB Technical Consultants and a staff person or persons from each appropriate Program Administrator who may review the proposals. Any reviews will be provided to the EEB Evaluation Consultant in writing.

Figure 2: Contractor Selection Process



- The EEB Evaluation Consultant then scores the proposals based primarily on the proposed work plan and approach, the contractors' experience and qualifications, and the proposed price. The top 2 or 3 finalist proposals are identified.

- The EEB Evaluation Consultant sends a summary of the finalist proposals, proposal analysis, and the EEB Consultant recommendations to the EEB Evaluation Committee members.
- The EEB Evaluation Committee reviews the summary and selects the evaluation contractor.
- A public summary of the basis for selecting the winning contractor is drafted by the EEB Evaluation Consultant and approved by the EEB Evaluation Committee. Each Program Administrator's purchasing agent retains this summary as the basis for the bid award.
- The EEB Evaluation Committee notifies the winning contractor and the other proposers.
- The Program Administrators then issue contracts and execute Purchase Orders.

EEB Evaluation Committee reports to the full EEB at the regularly scheduled EEB meetings. The report shall include information on the evaluation contractors selected since the previous EEB meeting**.**

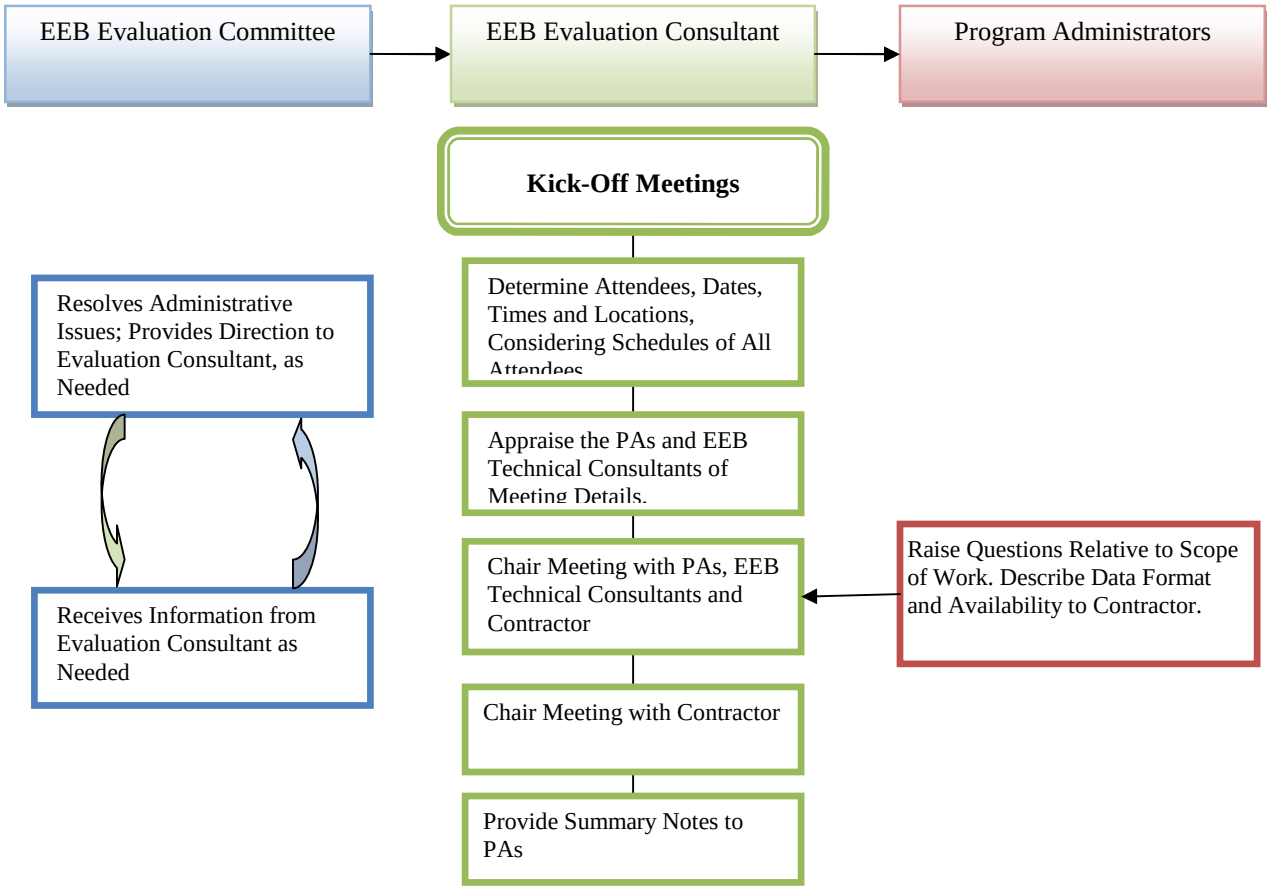
Project Initiation

Kick-off Meetings

Projects will be initiated through two kick-off meetings. In one meeting, the EEB Evaluation Consultant, the Program Administrators and the selected evaluation Contractor meet to discuss the proposed approach and establish data availability and processes for acquiring data. The EEB Evaluation Consultant organizes date, time, location and needed personnel for the meeting, apprising the Program Administrators of the final schedule. Representatives of the Program Administrators attend this first kick-off meeting, typically by phone, since meetings will be held either in the presence of the Evaluation Consultant or by telephone. This requirement is set in order to ensure the selected Contractor understands the project management structure and need for the study to be independent of those who administer the programs studied. The Program Administrators may raise questions relative to the scope of work and will describe data availability, format and transfer to the Contractor.

The other meeting will take place between the EEB Evaluation Consultant and the Contractor. In this meeting, direction on content and provision of the Final Workplan will be developed. Evaluation work plans must be developed to assure use of statistically valid monitoring and data collection techniques appropriate for the programs or measures being evaluated. All evaluations must contain a description of any problems encountered in the process of the evaluation, including, but not limited to, data collection issues, and recommendations regarding addressing those problems in preparation for future evaluations. The Contractor will also be apprised of all reporting relationships and procedural requirements. Following this meeting, the EEB Evaluation Consultant will supply the EEB Evaluation Committee and the Program Administrators with notes summarizing the meeting as provided by the Contractor. See Figure 3.

Figure 3: Kick-Off Meeting Process

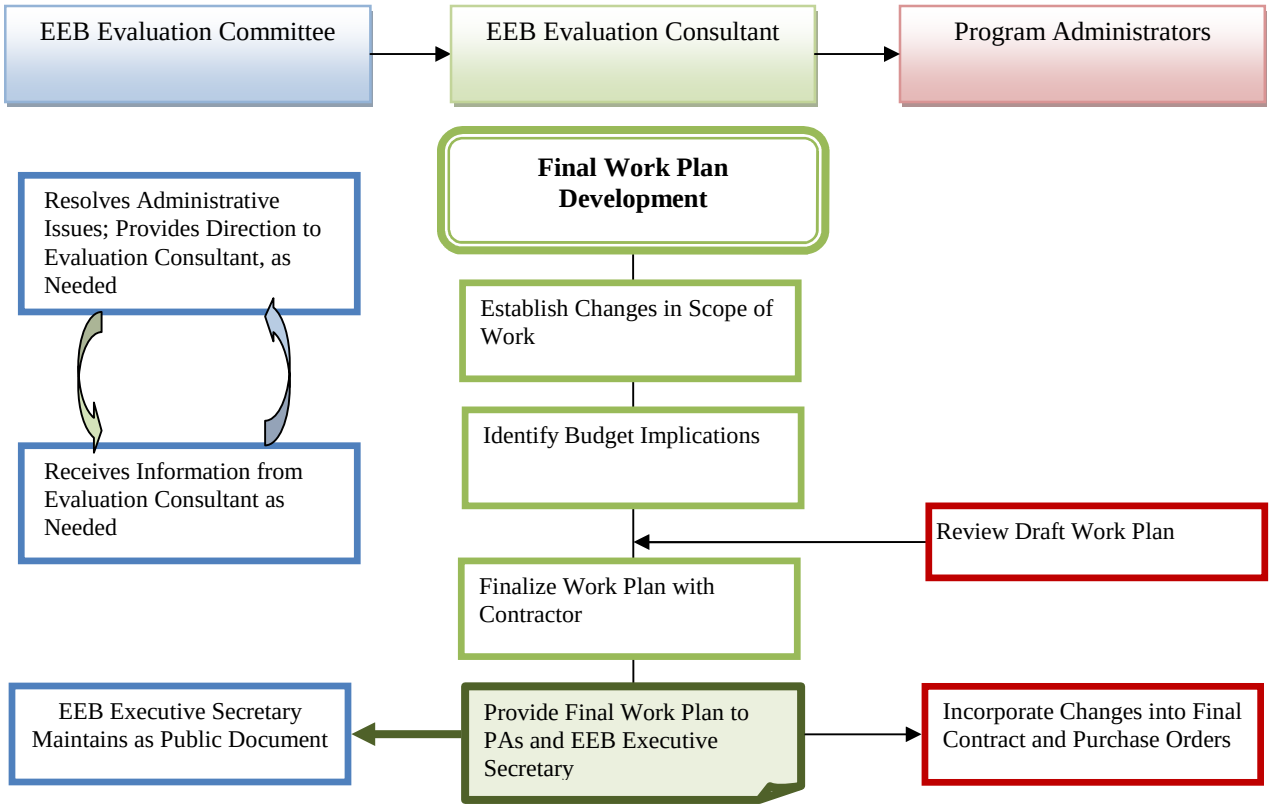


Development of the Final Work Plan

The kick-off meeting may identify scope changes to improve accuracy, align the plan with data availability, or reduce costs. These scope changes may impact the budget as well as changing the workplan.

The Program Administrators review potential changes to the work plan and provide comments in writing. The Evaluation Consultant considers these comments and then finalizes the workplan with the selected evaluation Contractor. The final work plan and budget will be provided to the Program Administrators for incorporation into Purchase Orders (or revised Purchase Orders). The Final Workplan will take precedence over the proposed work plan or any draft workplan in guiding the conduct of the study. See Figure 4.

Figure 4: Final Workplan Development



Project Management and Completion

Project Management

Once the evaluation Contractor has been selected and the evaluation has begun, the relationship between (1) the evaluation Contractor and Energy Efficiency Board Evaluation Consultant and (2) the Program Administrators, all Energy Efficiency Board members, and the EEB Technical Consultants will be treated in a similar fashion to a contested proceeding. There shall be no informal communications regarding the design or outcomes of the evaluation between the Program Administrators, the Energy Efficiency Board and the Evaluation Consultant or Evaluation Contractor. The EEB Evaluation Consultant may continue to consult with the EEB Evaluation Committee for administrative purposes, including issues regarding data requests. EEB Board members, including the Evaluation Committee, shall not communicate directly with the Evaluation Contractor conducting an active evaluation without the Evaluation Consultant being present. Input from the Program Administrators/Energy Efficiency Board shall be limited to responding to the Evaluation Consultant's request for data or technical assistance. Any communications shall be in writing and include a copy to the EEB Evaluation Consultant.

The EEB Evaluation Consultant leads the project management process (Figure 5) and is responsible for determining what information needs to be developed. In particular the Consultant will:

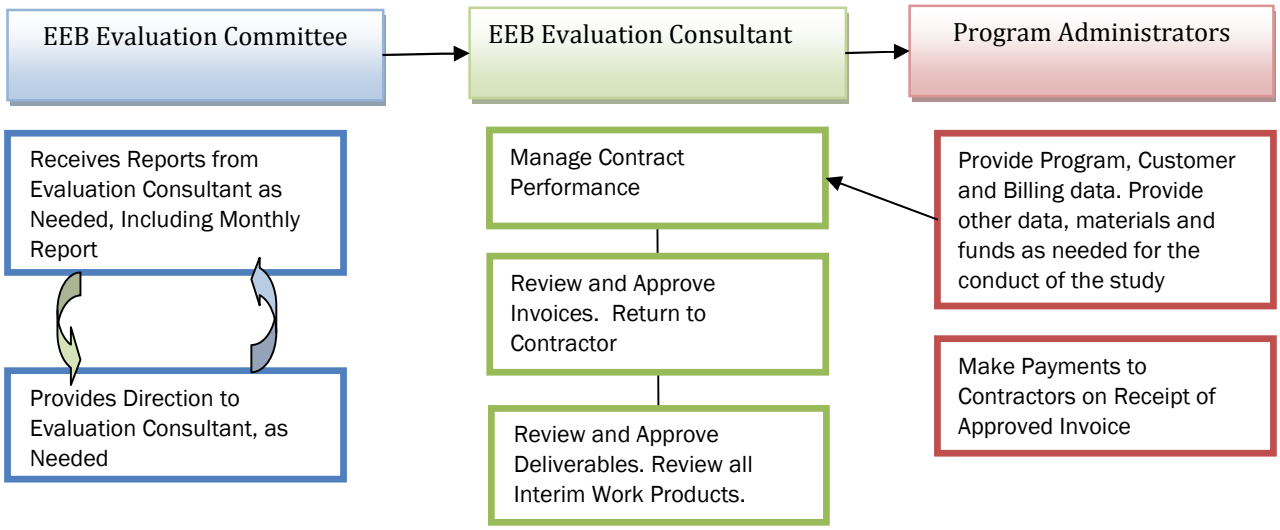
- Work with the Contractor to resolve issues and expedite solutions.
- Review and approve all deliverables and milestones.
- Review all interim work products and any issues of importance that may impact the results or cost of the evaluation. Provide Final Draft report to the Program Administrators for comment.
- Retain all communications from the Contractor and from Program Administrator representatives.

- Assess the EEB Technical Consultants and Program Administrators' written comments and provide any changes needed as a result of that review to the Contractor.
- Review and approve Contractor invoices for payment by the Program Administrators from the CEEF.
- Provide the full EEB reports on evaluation schedules and internal project deadlines through monthly reports to the Board.

The Program Administrators act as CEEF contract administrators and conduits for program information. Specifically, the Program Administrators:

- Initiate administrative actions necessary to support contract maintenance and payment.
- Issue payments to the independent evaluation contractors on approval of the EEB Evaluation Consultant.
- Provide required program, billing, customer data and any other information needed for the completion of the study.
- Provide materials, including stationary, envelopes, incentive checks and more as needed.

Figure 5: Project Management



Project Completion

The Program Administrators and Energy Efficiency Board may no longer be permitted to comment on internal draft evaluation reports. When the Draft report is ready for the review, the EEB Evaluation Consultant provides it to the EEB Executive Secretary who then notices the draft and provides it to the EEB Technical Consults and those Program Administrator representatives the PAs have designated. All Other Persons are invited to provide comments in writing. After the review comments are considered, the EEB Evaluation Consultant will do one or more of the following:

- Finalize the report with no additional changes
- Provide written direction to the Contractor on how to incorporate those changes that are accepted.
- Require a new Draft

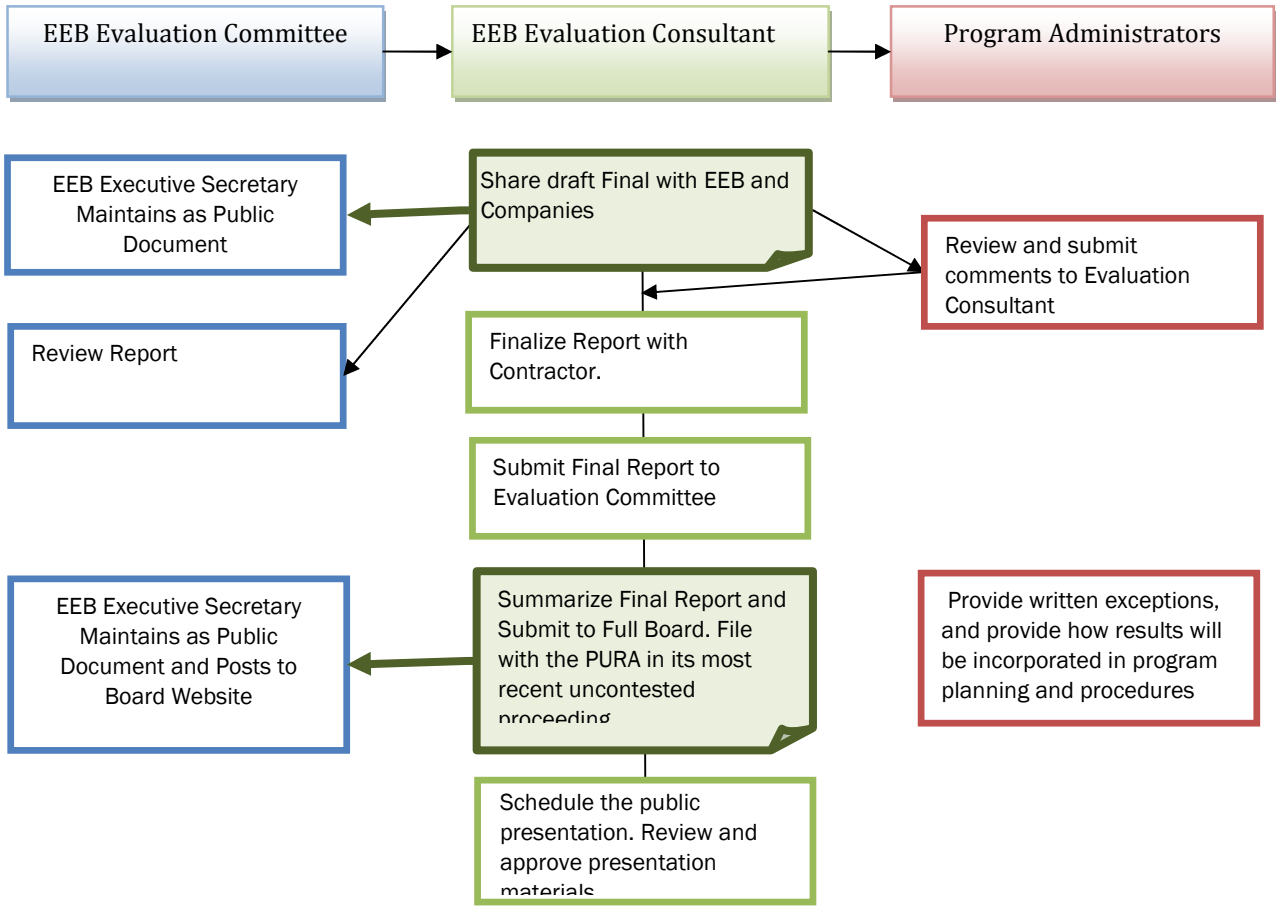
The Evaluation Consultant will consider the Program Administrator and EEB Technical Consultant comments and work with the Contractor to finalize the evaluation report. The Evaluation Consultant will then summarize the final report and submit that summary with the final report to the EEB Evaluation Committee.
Records of all communications during the evaluation, the draft report and written comments will be kept on file and maintained after the evaluation has been completed. This information shall be available to the public without protective status. The EEB Evaluation Committee is responsible for maintaining all evaluation products, both interim and final. Neither

the third party contractor nor the Program Administrators may release preliminary or final data without prior approval from the EEB Evaluation Committee or its designee.

When the final report is ready, the Evaluation Consultant, through the EEB Executive Secretary, will file the evaluation report with the Board and with the PURA in its most recent uncontested proceeding. The board shall post a copy of each report on its Internet web site.

The board and its members, including electric distribution and gas Program Administrator representatives, may file written comments regarding any evaluation with the PURA or for posting on the board's Internet web site. The Program Administrators will be required to indicate how they intend to implement each of the recommendations and incorporate the results into the PSD. The Program Administrators and the members of the EEB may also provide written exceptions to the report. Within fourteen days of the filing of any evaluation report, the PURA, members of the board or other interested persons may request in writing, and the PURA shall conduct, a transcribed technical meeting to review the methodology, results and recommendations of any evaluation. Participants in any such transcribed technical meeting shall include the Evaluation Consultant, the evaluation contractor and the Office of Consumer Counsel at its discretion. See Figure 6.

Figure 6: Project Completion



Regional Studies

The EEB Evaluation Consultant shall represent the EEB in all regional evaluation studies, either with the EM&V Forum or with individual states and groups of states. The EEB Evaluation consultant will assume the leadership role for the EEB in all discussions and negotiations involving the regional parties and bring any substantial issues before the Evaluation Committee. No other entity will hold itself out as representing Connecticut's interests. To the extent applicable and for all regional studies, the EEB Evaluation Consultant and the Program Administrators shall exercise responsibilities in an equivalent fashion as those identified in this document.

For evaluations where Connecticut is the minority participant in the study, the EEB evaluation consultant will represent the EEB's interests and contribute to all processes (including scoring and selection) as appropriate based on the level of participation and any processes governing the study outlined by the participating parties. For some of these smaller Regional Studies, the EEB Evaluation Consultant may delegate responsibility for monitoring the study to the Program Administrators, if appropriate and if they wish to accept that delegation.

Evaluation Studies 2011 - 2014

In planning which and how many evaluations to conduct each year, the EEB Evaluation Committee considers many factors, including but not limited to: the magnitude of cost and energy savings associated with the program, how recently comparable studies were done, needs expressed by program administrators, requirements of outside organizations, market conditions, recent or planned program changes, and any gaps identified. The EEB also works in a broad regional manner when planning evaluation activities for the up-coming program years. Through collaboration with regional agencies and utilities with similar interests, the EEB takes full advantage of opportunities to gather information in the most cost-effective manner. Occasionally, opportunities to participate in evaluation studies are unforeseen and, therefore, are not included in the planning process. If an unplanned opportunity proves to be in the best interest of Connecticut customers, the EEB Evaluation Committee will commit resources to those efforts as well. There are also occasions when a planned evaluation study no longer offers the value expected. The EEB Evaluation Committee assesses those conditions with the assistance of the Evaluation Consultant and determines whether changes should be made to the Program Evaluation Plan.

Research Area Approach to Organizing Evaluation

In 2011, due to the unprecedented need for new evaluation and market assessment studies, the Evaluation Committee instituted a Research Area Approach to managing and structuring the overall evaluation function.

Under a research area approach, expected and potential studies are divided among a number of research areas. For example, all Residential Retrofit and Retail Products studies through 2014 will be completed within one such research area. An RFP/RFQ is released for each research area. Respondents provide detailed information on work scope and budgets for the near-horizon studies, understanding of the issues and broad approach to addressing those issues, and a guaranteed set of rates for the full time period – in this case through 2014. After assessment of the expertise each team brings to the set of studies, a team of Contractors is selected. That team, and any additions required to meet the needs of the project, is then expected to complete any studies assigned to them.

Organizing evaluation in this fashion provides clear benefits and few potential risks. First, this approach allows substantial flexibility in study selection and timing. At times like this when substantial new program requirements and aggressive new goals are being fast-tracked, it is essential to be able to meet identified needs as they arise. When new studies are needed, other studies can be put on the back burner for a while to free up personnel and resources for supporting research.

Second, using this approach greatly reduces the lead time required to start new studies. Under typical approaches, lead time is required to:

- Develop RFP including provision of contract structure, scope of work, program descriptions and explanatory data, followed by review by interested parties
- Release of RFP to bidders list, providing time for response to questions and time for bidders to prepare their proposals
- Review and assess the proposals by interested parties. Follow-up questioning and reference checks are part of that process
- Selection and contract development

All told, the lead time requirements prior to selection sum to at least 2 months. When contract development is considered, an additional 6 months has been required for some projects. Use of the research area approach still requires the same upfront timeframe. However, that process is only required to be completed once for each research area. After selection, lead time is reduced to a discussion of the requirements of a particular study; discussion of data availability and development of an abbreviated workplan. Lead time with review of approximately 1 week is anticipated.

Related to these first two benefits is the ability to co-develop a study. Under the typical approach, a RFP goes out with study objectives described. The bidder then interprets those objectives and develops a

proposal that describes their preliminary workplan. At that point, it becomes much more difficult to ensure that the goals are clearly understood and to repurpose the workplan as needed. Better studies are likely to result when the discussion starts at the project objectives rather than having an existing workplan as the starting place for discussion. The difference can be described as "we need the study to produce this," rather than "we need your proposal to change that."

On a simple and pragmatic front, this approach provides an incentive to attract more bids. Since contractors are bidding on a multi-year project, they face reduced risk in hiring/increased certainty of profitability. The approach reduces the time and energy cost to CEEF of educating Contractors on how the system works in Connecticut, how programs are structured and how to capture information needed for the study. Finally, the CEEF is provided better cost-certainty. Bidders are asked to guarantee a set of hourly rates over the time frame of the contract.

The winning bidder would be the sole evaluation contractor for their particular research area. That team will be expected to handle all evaluation issues and therefore are responsible to do what is needed to make sufficient resources available for negotiated studies. However, the research area approach does not guarantee that the contractor will be provided any particular volume of work, nor does it guarantee the contractor team will retain the contract if their work is unsatisfactory or the research area is no longer needed.

While additional research areas may be needed in 2012, the following areas have been developed[34] thus far:

- Residential Retrofit and Retail Products
- Residential New Construction and Emerging Measures
- Small C&I
- Cross-Sector Studies
- Large C&I – no contract yet awarded

Because of substantial overlap in the teams, the two Residential Research Areas will be administratively and operationally combined when it is practicable and efficient to do so.

Evaluation and Research Types

Early in the program planning process and periodically throughout the programs' evolutions, **Market Assessments** examine pre-existing market conditions and ascertain the extent to which efficiency programs are likely to influence customer adoption of measures and practices. Careful market assessments are conducted to identify effective ways to influence key market players to take efficiency actions and to increase the breadth and depth of the actions taken.

Market assessments examine overall market conditions related to energy efficiency products and services, including current standard practices, average efficiency of equipment, consumer purchasing practices, and identification of market barriers.

Impact Support evaluation research encompasses all foundational research important as a basis for future evaluation. Assessment of the adequacy of engineering methodologies and background assumptions supporting the PSD provides the foundation against which evaluations will assess program performance. **Baseline studies** provide direct impact support by assessing pre-conditions that will no longer be measureable after program interventions have occurred.

After the program is fielded, **Process Evaluations** are used to determine the efficacy of program procedures and measures. Process evaluations assess the interactions between program services and procedures and the customers, contractors, and ancillary businesses that participate in them. Process evaluation is essential to provide for improved program delivery, increased cost effectiveness and customer satisfaction.

Impact evaluations verify the magnitude of energy savings and sources for differences between projected and realized savings; reporting the results and value of energy efficiency programs to regulatory bodies, ISO-New England, utility management, and program planners and administrators. Many different types of impact studies may be completed including end-use metering, engineering modeling, billing analyses, participant interview, surveys, and combinations of all of these.

Cost effectiveness assessment is part of impact evaluation, pointing the way to improve, expand, or reassess program offerings. These evaluations are conducted under the supervision of the EEB to provide credible, unbiased and transparent results.

[34] Contracts for the selected Contractor teams for the first 4 research areas are currently being developed.

Current and Planned Studies

The Tables below indicate evaluation studies either completed or beginning/underway in 2011. Table 1 highlights activities and studies that are not part of the Research Area Process.

Table 1: Evaluation Studies During 2011

Project Name- Residential	Project Type	Project Name Non-Res	Project Type
Home Energy Solutions (Complete)	Impact	Awareness of CEEF by CT Customers (Complete)	Market Assessment
CL&P Home Energy Report (Complete in 2012)	Impact and Process	Energy Conscious Blueprint (Complete)	Impact and Process
UI Home Energy Report (Complete in 2011)	Market Acceptance	O&M Services/RCx/BSC (Complete in 2012)	Impact
Residential New Construction Baseline (Complete Dec 2011)	Baseline/Impact Support		

Table 2 outlines those 2011 projects that are included in the Research Areas.

Table 2: Research Area Studies During 2011

Project Name- Residential	Project Type	Project Name Non-Res	Project Type
Residential Retrofit & Retail Products Research Area		**Small C&I Research Area**	
Measure Persistence HES and HES-IE (Complete in 2012)	Impact	Engineering and Billing Analysis for SBEA (Complete in 2012)	Impact
Residential Lighting Saturation (Complete in 2012)	Market Assessment	**Cross Sector Studies Research Area**	
Opportunities in Multifamily (Complete in 2012)	Market Assessment	PSD Assessment and Needs Analysis (Complete in 2011)	Impact Support
Lighting after EISA – Multipart project (Part 1 will be complete in 2011)	Market Assessment	Free Rider and Spillover – C&I (Complete in 2011)	Impact
Res New Construction and Emerging Measures		**Large C&I**	
Early Replacement Gas Water Heater – On-Demand Units (Complete in 2012)	Market Assessment	ISE Evaluation*	Impact
Heat Pump Water Heaters (Complete in 2012)	Market Assessment		
Ground Source Heat Pumps	Impact		
EM&V Forum – C&I		**EM&V Forum - Other**	
Measure Persistence C&I Lighting (Complete)	Impact	Incremental Cost Study (Complete in 2012)	Impact Support
C&I Unitary HVAC Loadshapes (Complete)	Impact Support	Development of Common Reporting Guidelines (Part 1 Complete)	Protocol Development
C&I Lighting Loadshapes (Complete)	Impact Support	Common EM&V Methods and Savings Assumptions (Complete)	Protocol Development
		Emerging Technologies (Part 1 Complete in 2012)	Impact Support

* Timing depends upon ISE's plans and is therefore uncertain

Evaluation Studies 2012 – 1214 (Preliminary)

As indicated above, many of the 2011 study will continue into 2012. Additionally, as with other years, changes in priorities and opportunities to participate in regional studies may eliminate studies or move them either earlier or later than is presented below. At this time, many programmatic changes are anticipated. Therefore it is much more likely that additional studies will be needed and, therefore, that priorities may change from those presented.
Table 3 indicates evaluation studies being considered to begin in 2012 or 2013. These studies are listed according to current priorities.

Table 3: Research Area Evaluation Studies Proposed to Begin in 2012 -2013

Residential Retrofit & Retail Products Research Area		**Small C&I Research Area**	
Low Income Opportunities and Means to Target the Markets	Market Assessment	New Construction Baseline	Impact Support
HES-IE	Impact and Process	Measure Persistence	Impact
Weatherization Baseline	Impact Support	Market for Finance Option	Market Assessment
HES Evaluation	Impact and Process	SBEA Opportunities for Programming Expansion	Market Assessment
Assessment of Methods to Reach 80% Weatherization Goal	Market Assessment	Sub-Market Segmentation	Market Assessment
Targeting Hard to Reach Communities	Market Assessment	Identification of Case Study Sectors	Market Assessment
PSD Developmental – Research Needs Identified in 2011 Cross-Sector Study	Impact Support	Opportunities for Small C&I BSC	Market Assessment
Quality Installation Verification	Impact and Process		
Cross Sector Studies		**Large C&I**	
Free Rider and Spillover – All Programs	Impact	Business Sustainability Challenge	Process
Data Mining – All Sectors	Impact and Process	Energy Opportunities	Impact and Process
Codes and Standards Potential	Market	Opportunities and Barrier in Municipal, Government, Schools and Hospitals	Market Potential
Assessing Bills Reductions	Impact	Assessment of Commercial Real Estate	Impact Support
Non-Energy Benefits – Jobs, Economy, Environmental	Impact	State Buildings – Metric Development, Comprehensive Projects	Market and Impact
Res New Construction and Emerging Measures		Performance Contracting in Municipal, Government, Schools and Hospitals	Market Assessment
Ductless Heat Pump	Impact	C&I HVAC Opportunities to Bundle Measures	Market Assessment
Phantom Loads	Market Assessment		
Baseline and Metrics to Ramp Up Efficiency in RNC	Impact Support		

EM&V Forum Evaluation 2012

Projects initiated within the Regional EM&V Forum also affect evaluation activities in 2012 and beyond. The Forum determines, in consultation with its membership, the studies that will be completed and the budgets for each project. This planning process is not expected to be completed until October. Ten states and the District of Columbia participate in the Forum, but not all subscribe to every study commissioned by the Forum.

Connecticut has been an active participant since the Forum's inception and intends to continue doing so. Participation in the Forum provides cost-effective solutions for projects that might be too costly to do without regional support, and provides opportunities to achieve consistency in reporting results across the region.

Communications Protocol for Evaluation

The purpose of this document is to provide communication procedures for Connecticut Energy Efficiency Fund evaluations in accordance with the provisions of Public Act 11-80.

A. Confidential Customer Data

Processes for protection of confidential customer information are important since substantial quantities of this information are typically exchanged during the course of evaluation studies. Confidential customer data is defined as any personally identifiable customer information, including but not limited to name, account number, telephone number, email address, and service or billing address. The purpose of these procedures is to identify any correspondence that contains confidential customer data. If correspondence that has been identified as containing confidential customer data is requested for public release through a Public Utilities Regulatory Authority (PURA) process, a request from the general public, or any other request, the EEB Evaluation Consultant will submit the document(s) to the PURA for a determination regarding the need for a protective order, redaction, or other methodology to protect the privacy of customers while assuring transparency of the evaluation process.

The following procedures will be employed when dealing with confidential customer data during the evaluation process. The evaluation consultant, program administrators, and evaluation contractors will all observe the following for communications between each other:

- All documents that contain confidential customer information must be clearly labeled as such. It is unacceptable for these documents to contain statements that they "may" contain confidential information. Documents containing confidential customer data must include the word "confidential" or "contains confidential customer information" on every page.
- Email that contains confidential customer information in the body or attachments must use the word "confidential" in the subject line. In addition, any attachments that contain confidential customer information must include the word "Confidential" on every page.
- When responding to an email that contains confidential customer information and for which the confidential information is not required for the response, all confidential customer information must be removed. The confidential label must then be removed from the subject line.
- If confidential customer information is transmitted by the one of the program administrators without the labeling described above, that program administrator is solely responsible in the event that information is re-transmitted or otherwise made available to other parties by one of the recipients.

B. Communications Prior to Study Inception

1) When an Evaluation Contractor has not yet been selected for a given evaluation, there are no restrictions on communications between the Evaluation Consultant, members of the Board, the Board Technical Consultants and Program Administrators (collectively, "Other Persons"). As provided in the Evaluation Roadmap, anyone in these organizations may offer suggestions, information and opinions concerning the focus of studies, issues and methods that might be included in a Request for Proposal or Request for Qualifications, and on the quality of Contractor submissions in response to RFPs. These persons may provide recommendations on which Contractor will be selected, although they have no vote in the final Contractor selection.

During the development of the Annual Evaluation Plan, these Persons may suggest studies to be included in the Plan, provide rankings of study priority, and outline important issues to consider.

Communications prior to study inception will generally be in written form and will be retained. Should meetings or conference calls be needed, either the EEB Executive Secretary will be part of the call and will take minutes, or the call will be recorded.

2) After the Contractor has been selected, the Other Persons may attend the open portion of Kick-off meetings to better understand the methods that will be employed, ask questions, make suggestions, and provide information on data availability and procedures to access that data.

C. Communications During the Study

There shall be no informal communications regarding the design or outcomes of an active evaluation between the Program Administrator staff, Energy Efficiency Board members and the Evaluation Consultant and Contractor. The EEB Evaluation Consultant may continue to consult with the EEB Evaluation Committee for administrative purposes, including issues regarding data requests. EEB Board members, including members of the evaluation committee, shall not communicate directly with an Evaluation Contractor conducting an active evaluation without the Evaluation Consultant being present. Any communications between the Program Administrators and an Evaluation Contractor conducting an active evaluation shall be in writing and include a copy to the EEB Evaluation Consultant and shall be limited to data and technical assistance requests and responses and other information requested by the EEB Evaluation Consultant. Records of all communications during the evaluation, reviews of the draft report and written comments on the final report shall be kept on file and maintained after the evaluation has been completed. These records, with the exception of documents or emails containing confidential information, shall be made available to members of the public upon request.
To meet these requirements:
1) The EEB Evaluation Consultant will initiate requests for technical assistance, data and administrative action whenever needed. The requests will most frequently be made in writing; however some telephone communication is likely to be needed in order to clarify needs and reduce delays.
2) When these requests are made, the Other Person can respond with the materials, data, and/or other action required. The Other Person may also respond with any clarifying questions. Clarifying questions may not include questions regarding the need for the materials, data, and/or action, except to suggest that there may be a superior solution, which the EEB Evaluation Consultant will consider.
3) Other Persons will not initiate these discussions.

D. Communications with Contractors

Determining appropriate Communications protocols between the EEB Evaluation Consultant, the Contractor that performs the evaluation study, and Other Persons can be difficult. While the Act makes clear that Other Persons generally should not be in direct communication with Contractors, there are times when such communications are important and solutions involving intermediaries inefficient. A careful balance follows:
1) Under nearly all circumstances, Other Persons may not communicate directly with the Contractor, either by phone, in writing, or in person. Board members, including Program Administrators' representatives, may not communicate with an evaluation contractor about an ongoing evaluation except with the express permission of the EEB Evaluation Consultant, which may only be granted if the EEB Evaluation Consultant believes the communication will not compromise the independence of the evaluation.
2) Any allowed communications that can be conducted in writing will be conducted in writing. Those written communications will be sent to the EEB Evaluation Consultant for transmission to the Contractor. Responses will also be transmitted through the EEB Evaluation Consultant.

Exceptions

- As described in Section B (2), the Kick-off meeting is an exception to the written comment requirement.
- Communications concerning data collection. When discussions must be made by phone, most often concerning secure data transfer, either the EEB Evaluation Consultant or the EEB Executive Secretary will also be on the phone. In cases where time is of the essence and neither the EEB Evaluation Consultant nor the EEB Executive Secretary can be available, the Contractor will record the call and provide that recording to the EEB Evaluation Consultant.
- Direct communications concerning data transfer to be held between Program Administrator IT personnel and their IT counterparts for the Contractor so long as no other Program Administrator staff is participating in the meeting in any way, including as an inactive participant.
- Contract issues that extend beyond the study start date. Utility purchasing agents may communicate with the Contractor for the purpose of resolving contract issues *that do not in any way affect the study or outcomes.*

Contractors will be fully apprised of these requirements and must agree to adhere to them.

E. Site Reports

Site Reports may become available (depending on the nature of study) prior to completion of the Draft report. Site Reports provide detailed information on what the Contractor's team found at each of the customer premises inspected during the study. Findings may include things such as differences between tracking system equipment and that found in the facility, logger locations, conditions of operations and more. The site reports reflect the Contractors' collection of data. Because the site reports may contain information that would help the Program Administrators better serve their participants or prevent ongoing problems, it is important that the site reports be provided to the Program Administrators as soon as they are generated. Provision of site reports and response to questions concerning information in a site report will be completed using the protocols described in the "Communications with Contractors" section. These reports will contain confidential data and will be treated as such.

1) The EEB Evaluation Consultant will provide site reports to the Program Administrators (each Program Administrator receiving the reports for their customers) when all site reports are completed.

2) If the Program Administrators have questions concerning a site report, they will submit those questions in writing to the EEB Evaluation Consultant. The EEB Evaluation Consultant will review the questions submitted and, if appropriate, provide the questions to the Contractor.

F. Communications Concerning Study Results/Review of Draft Materials

The Decision in 10-10-03 provides, "The Companies and Energy Efficiency Board will no longer be permitted to comment on internal draft evaluation reports. When the Evaluation group is ready, the Evaluation Committee will issue the report to the Companies, EEB members and the Program Technical Consultants for written comment that shall become part of EEB's public record. At that time, the EDCs and the Energy Efficiency Board may make public written comments. The Evaluation group will then make modifications at their discretion then issue either a final report or another draft report."

Records of all written/email communications during the evaluation, the draft report and written comments on the planning and draft reports are kept on electronic file and maintained after the evaluation has been completed. This information is available to the public upon request.

As study results become available, it is especially important to maintain careful communications. For this reason, at this stage the EEB Executive Secretary becomes more closely involved and maintains redundant documentation of materials and reviews.

1) When the Draft report is ready for the review, the EEB Evaluation Consultant provides it to the EEB Executive Secretary who then notices the draft and provides it to the appropriate EEB Technical Consultants and those Program Administrator representatives the Program Administrators have designated. All Other Persons are invited to provide comments in writing.

2) Written comments are returned to the EEB Executive Secretary and to the EEB Evaluation Consultant. The Evaluation Consultant will assess the comments. If clarifying questions arise, those questions will be submitted to the originating reviewer with copy to the EEB Executive Secretary. If a phone meeting is prudent, both the EEB Executive Secretary and the EEB Evaluation Consultant will attend. If both cannot be available, the meeting will be recorded and the recording preserved.

3) After the review comments are considered, the EEB Evaluation Consultant will do one or more of the following:

- Finalize the report with no additional changes
- Provide written direction to the Contractor on how to incorporate those changes that are accepted.
- Require a new Draft

4) When the final report is ready, the EEB Evaluation Consultant, through the EEB Executive Secretary, will file the evaluation report with the Board and with the PURA in its most recent uncontested proceeding. The Board shall post a copy of each report on its Internet web site.

The Board and its members, including Program Administrator representatives, may file written comments regarding any evaluation with the PURA or for posting on the Board's Internet web site.

Conclusion

The EEB Evaluation Committee takes its responsibility for program evaluation very seriously. It is critical that the programs be evaluated, measured, and verified in a way that provides confidence to the public at large that the savings are real and in a

way that enables the Companies to use those savings estimates and other results with full confidence. There is a need to ensure both the reality and the perception of the independence and objectivity of EM&V activities.

Moreover, the current and future efficiency programs are supported and improved through careful research into current use and equipment, customer segments and the associated barriers for each, ownership patterns, and examination of best practices in other jurisdictions. Research completed within the evaluation group provides that information.

These research studies assist regulators, the Energy Efficiency Board and the program administrators to maintain excellent practices and develop new programming options to meet Connecticut's efficiency needs. We are convinced that the Plan outlined in this document will provide these critical studies with objectivity, with excellence, and with the best interests of Connecticut rate payers in the forefront.