



Connecticut Department of

**ENERGY &
ENVIRONMENTAL
PROTECTION**

APPROVAL OF THE
2012 CONSERVATION AND LOAD MANAGEMENT PLAN

February 17, 2012

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I. DEPARTMENT PROCESS

Pursuant to Section 33(d)(1) 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, the Energy Conservation Management Board advises and assists electric distribution companies in the development and implementation of a comprehensive conservation and load management plan. Section 33(d)(1) requires that the plan be submitted for approval to the Department of Energy and Environmental Protection (Department), which can approve, modify or reject the plan in an uncontested proceeding. Prior to enactment of Public Act 11-80, the review and approval responsibility was performed by the Public Utilities Regulatory Authority (PURA). Conservation and load management programs are primarily funded through a 3 mill/kWh charge assessed to end use customers of electric distribution companies. Pursuant to Section 33(b) of the Act, PURA must authorize disbursements from the Conservation and Load Management Fund, an account into which the assessments are deposited.

On September 30, 2011, the Energy Efficiency Board submitted the 2012 Electric and Natural Gas Conservation and Load Management Plan (2012 Plan), which proposes 2012 C&LM programs and budgets. On December 23, 2011, the Department issued a Notice of Request for Comments and Technical Meeting for the 2012 C&LM Plan. On January 10, 2012, the Department issued correspondence which outlined the topics for discussion and areas of inquiry the Department would pursue at the Technical Meeting.

The Technical Meeting was held on January 12, 2012, at its offices in New Britain, CT. The Department received written comments on the 2012 Plan from the following: Environment Northeast (ENE), Connecticut Industrial Energy Consumers; EcoSmart Home Services; Energy Efficiency Board; The Connecticut Light and Power Company (CL&P), North Energy Efficiency Partnerships (NEEP), CT Neighbor to Neighbor Energy Challenge (N2N), and Joint Comments Submitted by ENE, National Resources Defense Council, Sierra Club, 350 CT, Citizens Campaign for the Environment, Clean Water Action CT, Connecticut Fund for the Environment, Environment Connecticut, and Sierra Club - CT Chapter.

II. 2012 C&LM PLAN

A. GENERAL

In this determination the Department approves the 2012 Base Conservation and Load Management (C&LM) Plan and Budget. Regarding the proposal to expand spending included in the 2012 Plan, as noted in the Department's Notice of Technical Meeting, an analysis of this proposal will be conducted as part of the Department's 2012 Integrated Resource Planning proceeding.

B. 2012 BUDGET

1. 2012 Proposed Budget & Funding Sources

The 2012 Plan proposes a Base Budget of \$84,191,749 for CL&P and \$21,369,999 for The United Illuminating Company (UI), for a combined Total Budget of \$105,561,748. See 2012 Plan, Table A1, page 20. The 2012 Base Budget represents spending that would be funded through current funding sources.

Table 1 shows the sources of revenue for the proposed 2012 budget. As the table shows, revenue from the 3 mill/kWh assessment represents approximately 80% of the total budget while the remaining 20% is funded from other sources such as ISO-NE programs, RGGI, Class III Renewable Energy Credits (RECs), and carrying charges.

Table 1

Proposed 2012 C&LM Base Budget				
Source of C&LM Revenues	CL&P	UI	Total	Percentage of Total
3 mill/kWh Assessment	\$67,359,070	\$16,494,000	\$83,853,070	79.4%
ISO-NE Other Demand Resources (ODR)	\$6,500,000	\$1,600,000	\$8,100,000	7.7%
ISO-NE Fwd. Capacity Market Demand Response	\$3,500,000	\$1,376,000	\$4,876,000	4.6%
Class III Renewable Energy Credits	\$3,600,000	\$900,000	\$4,500,000	4.3%
Carrying Charges	\$800,000	-	\$800,000	0.8%
RGGI*	<u>\$2,432,679</u>	<u>\$1,000,000</u>	<u>\$3,432,679</u>	<u>3.3%</u>
TOTAL	\$84,191,749	\$21,370,000	\$105,561,749	100%

*RGGI Budget is based on 50% of the \$2/allowance for 2012-2014.
Source of data: 2012 C&LM Plan, Table A2, p. 20.

2. 2011 Spending Levels

In 2011, CL&P spent \$101.6 million on its C&LM programs while UI spent \$23.1 million, for total spending of \$124.7 million. Table 2 shows that the EDCs anticipated total revenues of \$105.9 million for the 2011 C&LM Plan, an amount that is virtually identical to the total anticipated revenues for 2012¹.

¹ Although the total funding is nearly equal, there are variations in funding from individual sources. An example is RGGI which declines by over \$3 million in 2012.

Table 2

2011 C&LM Base Budget				
Source of C&LM Revenues	CL&P	UI	Total	Percentage of Total
3 mill/kWh Assessment	\$66,883,730	\$16,182,000	\$83,065,730	78.4%
ISO-NE Other Demand Resources (ODR)	\$6,400,000	\$1,500,000	\$7,900,000	7.5%
ISO-NE Fwd. Capacity Market Demand Response	\$3,000,000	-	\$3,000,000	2.8%
Class III Renewable Energy Credits	\$4,000,000	\$1,000,000	\$5,000,000	4.7%
Carrying Charges	-	-	\$0	0.0%
RGGI*	<u>\$4,865,359</u>	<u>\$2,100,000</u>	<u>\$6,965,359</u>	<u>6.6%</u>
TOTAL	\$85,149,089	\$20,782,000	\$105,931,089	100%

*RGGI Budget is based on 50% of the \$2/allowance for 2010-2012.
Source of data: 2011 C&LM Plan, Table A2, p. 24.

Table 3 compares the proposed 2012 budget to 2011 C&LM spending. As the table shows, CL&P and UI, (together Electric Distribution Companies or EDCs) spent about \$124.7 million in 2011.² The EDCs have proposed a combined 2012 C&LM budget of \$105.5 million, a reduction of \$19.1 million or about 15.3% below 2011 spending levels.

Table 3

2012 Budget vs. 2011 Spending			
	2011 C&LM Spending	2012 C&LM Budget	Difference
CL&P	\$101,600,000	\$84,191,749	\$17,408,251
UI	<u>\$23,100,000</u>	<u>\$21,370,000</u>	<u>\$1,730,000</u>
	\$124,700,000	\$105,561,749	\$19,138,251

Sources of data:
2012 C&LM Plan, Table A2, p. 20.
Financial Results as of 12/31/11, January 11, 2012 Board Meeting.

3. 2012 Budget & Spending Recommendation

OCC states that the Base Budget of \$105.9 million for 2012 is stable, reflecting nearly the identical revenues available in the 2011 Base Budget of \$105.5 million. As a result, there is no need to increase the 2012 Base Budget to match the level of spending achieved in 2011. Regarding forward spending, OCC believes that borrowing from future collections should not be authorized without some sort of a true-up mechanism. However, should the Department authorize forward spending OCC requests that the Department recommend that PURA establish a periodic true-up mechanism as well as the rules that would govern this policy. OCC Comments, p. 2.

CL&P states that while the Department is authorizing the EDCs to increase 2012 program spending to meet demand the Department did not address the potential for the

² CL&P used 2010 carry over funds to meet 2011 program demand, spending \$101.6 million, or about \$16.5 million above its anticipated 2011 revenues of \$85.1 million.

lost distribution revenues associated with increased program activity. To fund the increase in energy efficiency above 2012 Base Plan spending and accommodate lost sales associated with the increase CL&P proposes to implement a Conservation Adjustment Mechanism (CAM) that includes recovery of lost distribution revenues. CL&P Comments, p. 2.

Funding levels have been relatively stable and predictable, but annual budgets have fluctuated due to legislative action and over/under spending. Fluctuation in spending for C&LM programs results in lost energy savings, disruption in the vendor community and job losses among the professionals who deliver these services. As noted by N2N, changes in program spending have led to an unstable business environment among vendors. These companies, which are vital to program delivery, must have confidence in the sustainability of Connecticut's C&LM programs to be willing to invest their own resources in staff, training, and equipment and to achieve increased program goals. N2N Comments, p. 4.

The Department seeks to limit uncertainty by providing the EDCs with budget flexibility to accommodate the naturally occurring seasonal and market based fluctuations that occur in program activity and spending. For example, rolling budgets can accommodate fluctuations in spending. Regarding spending constraints, past PURA directives which attempted to match revenue collection to annual spending limited the EDC's ability to accommodate changes in program demand within budget cycles even though such may have been an unintended consequence of these past rulings.

The Department is not increasing the 2012 Base Budget. Instead, the Department recommends that 2012 spending keep pace with 2011 spending to stabilize program activity and provide confidence among the vendor community. Further, the Department recognizes that it can maintain 2011 spending by simply authorizing CL&P to use its 2011 carryover. However, this would not provide any additional revenues for self-funding of residential loans. Therefore, to increase the revenues available for self-funding while providing spending stability and budget flexibility the Department will recommend that PURA allocate \$4 million of CL&P's 2011 carry over and the entire amount of UI's 2011 carry over to self-funding. In addition, the Department will recommend that PURA allow the EDCs to spend forward up to 25% of their respective 2013 C&LM budgets, approximately \$21 million for CL&P and \$5.3 million for UI.³

Regarding forward spending, PURA has a long standing policy that allows the EDCs to apply carrying charges to the under or over expenditure of C&LM funds, which policy would apply in this case. Therefore, it is unnecessary to implement a CAM to address forward spending at this time. Further, the Department sees no reason to implement a true-up at this time. However, the EDCs must regularly inform the Energy Efficiency Board regarding 2012 spending.

³ These amounts reflect 25% of each EDC's 2012 budget; \$84.1 million for CL&P and \$21.4 million for UI.

The Department recommends the following:

1. The EDCs should be authorized to maintain 2012 program spending at a level that is at least commensurate with 2011 spending levels;
2. CL&P, in consultation with the Energy Efficiency Board, should be authorized to expend its remaining carry over balance (after allocating to direct-funding of residential loans) during 2012;
3. The EDCs should be authorized to use up to 25% of anticipated C&LM revenues from 2013 to meet 2012 program demand;
4. PURA should consider rescinding the directives imposed on the EDCs in the Decision dated June 19, 2008, in Docket No. 07-10-03 (at p. 6) which constrains program spending; and,
5. PURA should consider rescinding Order No. 13 in the Decision dated March 17, 2010, in Docket No. 09-10-03, which limits oil spending for income-eligible customers.

C. EVALUATION, MEASUREMENT AND VERIFICATION (EM&V) PROTOCOL

In its January 10, 2012 correspondence, Topics for Discussion and Areas of Inquiry, the Department issued three recommendations, indicating that it will take a more active role in participation and oversight of the EM&V process in order to improve it and to fulfill the requirements and intent of Section 33(d)(4) of Public Act 11-80.

First, an increased staff commitment by the Department will mean that DEEP will be more actively involved in the planning and implementation of evaluation studies to ensure that the studies' recommendations adopted by the Energy Efficiency Board are implemented and that modifications to the Program Savings Documentation Manual are appropriately inputted.

Second, the Department indicated that it will work with the Energy Efficiency Board's Evaluation Committee to further improve current metrics so as to provide a guideline and overview for evaluating the efficacy of the EM&V process and the overall success of C&LM programs. These metrics will provide a useful, transparent benchmark for the General Assembly and other policymakers.

Third, the Department stated that it will require the Energy Efficiency Board to submit to the Department a filing no later than March 1, 2012, for each of the evaluation studies completed in 2011, that includes a written description of how the Program Administrators will (a) implement each of the studies' recommendations and (b) incorporate the evaluation results into the Program Savings Documentation Manual. The Department will require the Energy Efficiency Board to submit this information as part of the Evaluation Report will be submitted to the General Assembly on November 1, 2012, and annually thereafter. For each of the Connecticut-specific evaluation studies completed in 2012, the Energy Efficiency Board shall submit this information within 30 days of their completion. Where applicable, the Energy Efficiency Board shall

submit information in (a) and (b) above, for each of the completed studies funded through the NEEP EM&V Forum within 30 days of their completion.

At the Technical Meeting, the Energy Efficiency Board, OCC and the EDCs responded positively to each of these recommendations. There was support for greater Department staff involvement at the planning, implementation and program review stages of the EM&V process.

The Energy Efficiency Board indicated that while it currently uses a number of metrics to measure savings and program effectiveness, it will work with the Department to develop and refine metrics that measure and explain overall program effectiveness. The Energy Efficiency Board suggested that it should also develop metrics to measure their own effectiveness in executing the EM&V process. The Department looks forward to working with the Energy Efficiency Board on developing both of these measures.

In its Written Comments, the Energy Efficiency Board indicated that under current practices, the Program Administrators submit, in writing, their intentions pertaining to (a) implementing recommendations of an evaluation study and (b) incorporating the evaluation results into the Program Savings Documentation Manual, within 30 days after an evaluation study is completed. The Energy Efficiency Board suggested that it file written recommendations 45 days after the evaluation study is finalized, i.e., after the Program Administrators' responses are submitted, which would enable the Energy Efficiency Board recommendations to include the responses submitted by the Program Administrators. The Department believes that this suggestion is a suitable process going forward, and accepts it in lieu of a March 1, 2012, filing. The Department clarifies that in the future, a summary of recommendations from evaluation studies and the responses of Program Administrators and the Energy Efficiency Board will be submitted as part of the C&LM Plan filed on October 1st and would therefore meet the November 1st legislative deadline set forth in Public Act 11-80 §33(d)(4).

OCC addressed the method and consistency of data collection and storage by the Program Administrators, and the need to move from paper to electronic collection and tracking. OCC pointed out that this issue has been an important one in the evaluation of the Home Energy Solutions (HES) program, the Energy Conscious Blue Print program (ECB) and the Small Business Energy Advantage program (SBEA). A HES vendor indicated that customer data collection is in the process of moving toward electronic storage and reporting. UI pointed out that data takes many forms: billing, customer intake, program implementation and savings documentation, and, that not all forms of data are conveniently collected and stored electronically. The Program Administrators explained that a program, such as ECB, requires customized architectural drawings, in which the value of electronic storage is less demonstrated. Moreover, accessing customer billing data, which is configured in accordance with the distribution companies' respective billing departments, can also pose formatting challenges.

In its written comments, the EEB emphasized the value of electronic conversion and storage of engineering drawings; even if they cannot be converted to tabular form, they could be scanned and stored electronically in a way that allows the information to be located and stored together with the rest of the program and project data. Keeping all information together, in complete form and in electronic storage has benefits to the evaluation contractor and will result in cost savings in evaluation studies. DEEP concurs and directs the Program Administrators to make improvements in the collection, use and storage of their data systems a priority. The Program Administrators shall develop a process for electronic collection and storage of engineering drawings and other qualitative information in order to improve data availability and consistency. DEEP believes that these steps will reduce data collection and data handling costs in evaluation studies.

At the Technical Meeting, it was suggested that in future evaluation planning and in RFP solicitations for independent evaluations, the Program Administrators identify the type of data used in the program to be studied. This would give prospective evaluators a better idea of the type of data bases to be analyzed to evaluate a program. An outside evaluator could include data formatting issues and the efficiency and consistency of data collection and tracking as program components to be included in an independent evaluation. It was suggested that customer data should be stored and tracked in a way that simplifies usage for evaluation, measurement and verification purposes. The Department supports these suggestions and believes that data formatting and more efficient methods of data storage and tracking should be included in future program evaluations.

It was suggested that savings from U.S. Department of Energy and American Reinvestment and Recovery Act (ARRA) funds be quantified and reported to obtain a complete and accurate accounting of savings received from all conservation efforts. Another future issue is the collection and evaluation of oil savings from ARRA funding. The Department supports this suggestion and directs that these savings be identified, reported and included in future EM&V activities.

At the Technical Meeting, Department staff also indicated that it had recommended changes to the Energy Efficiency Board's 2012 Program Evaluation Plan that was submitted as part of the 2012 C&LM Plan, filed on October 1, 2011. The Department has recommended changes in the EEB EM&V process to conform to the requirements of Public Act 11-80 to ensure that program evaluations are independent, cost-effective, comprehensive, and timely and that evaluation results are accurately taken into account in program development and implementation. The Department's recommended changes to the Energy Efficiency Board Program Evaluation Plan are summarized below:

- The Evaluation Plan has been modified in several places to state that DEEP, in addition to PURA, should receive reports and filings;
- DEEP has included the EEB Evaluation Committee in several stages of the evaluation process;

- The name of the winning contractor for an evaluation study may be obtained upon request;
- Comments may only be submitted on the public draft evaluation report. Neither the Program Administrators nor EEB members are permitted to comment on internal draft evaluation reports, except that Program Administrators are allowed to respond in writing on matters of fact when requested in writing by the EEB Evaluation Consultant;
- Within 30 days after the completion of an evaluation study, Program Administrators shall be required to indicate in writing how they intend to implement each of the recommendations and incorporate the evaluation results into the Program Savings Documentation.
- 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).
- 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.

D. HOME ENERGY SOLUTIONS – HES

1. General

The HES program began in 2006 and has evolved to become the Energy Efficiency Fund's flagship residential energy efficiency program. The Companies believe that HES will be "the primary vehicle which will be used to fulfill the State of Connecticut's goal of weatherizing 80% of existing homes by 2030" as required under Section 33 of Public Act 11-80. 2012 C&LM Plan, p. 107.

2. Customer Copayment

The cost to deliver HES core services is approximately \$600 to \$800 per home. At the start of this program in 2006 and through a portion of 2007, HES services were delivered to all customers at no cost, regardless of the fuel used to heat their home. After providing these services for free to all customers in 2006/2007, in late 2007 the Energy Efficiency Board implemented a \$300 copayment for customers who heat their home with oil or propane. Customer participation among oil and propane customers effectively ceased when the \$300 oil/propane copayment was introduced. In early 2008 PURA directed the implementation of a \$75 copayment for customers who heat their home with electricity or natural gas thereby requiring all customers to contribute to the cost of the HES assessment.

The higher \$300 oil/propane copayment remains in place. However, to assure the continued participation in the HES program among oil and propane customers, the PURA has allowed the Energy Efficiency Board and the EDCs to use various funding sources (i.e., revenues that are not directly recovered through the three-mill/kWh

assessment on electric bills) to buy down the \$300 copayment to the same price that is charged to electric and natural gas customers. As a result, to date HES services have been offered to all customers for the same copayment. However, this issue is complicated by the fact that revenue from these alternate sources has been, and continues to be, uncertain. This has resulted in constant regulatory intervention to ensure that oil customers have access to HES services without having to charge them the \$300 oil/propane copayment.

ENE expressed support of a modification to the current level of HES copayment as well as the current copayment policy. ENE also urges the Department to recommend that PURA rescind a past ruling regarding HES vendor incentives. ENE Comments, p. 1.

To avoid confusion in the marketplace UI believes that the EDCs must control the copayment. Therefore, UI does not support allowing HES vendors to modify the copayment. Instead, UI requests that the EDCs, in consultation with the Energy Efficiency Board, be provided the latitude to increase or decrease the copayment and to be able to offer 'limited time offers' that would apply to all HES vendors to control program activity. UI Comments, p. 2.

Although the \$75 copayment represents a relatively small portion of the \$600-\$800 cost, assessing this charge has created a number of challenges for Program Administrators. One example occurred in 2009 as vendors sought to discount the copayment to achieve a larger share of the HES market. This resulted in confusion and dissatisfaction among consumers and vendors. Customers were unhappy to learn (for example) that a relative or neighbor received HES services for free while they paid \$75; vendors complained that their competitors were stealing customers or not playing by the rules. The Companies responded by policing vendor activity. In response, the Energy Efficiency Board recommended that all customers must pay \$75 at the time of the HES visit. The PURA approved the recommendation and this policy remains in place today. Noteworthy is the fact that the EDCs and vendors have indicated that the mere existence of a copayment is a barrier to participation.

Home performance, the process of improving the overall energy efficiency of residential structures, remains an emerging market. As such, consumers are generally unfamiliar with these services and the value they provide. This situation is exacerbated because the core services delivered under HES often do not provide a significant, immediate or easily discernable difference in a customer's energy bill or a home's comfort. Instead, these services provide incremental energy savings and related benefits that are realized over time.

Consumers will be more likely to value home performance as this market develops and as consumer attitude toward energy changes. Until then, the EDCs and vendors must focus on *selling* the benefits of HES so that customers begin to value

these services.⁴ In turn, this should help mitigate issues related to the copayment. Given the goal of weatherizing 80% of Connecticut's homes by 2030, educating consumers to the value of home performance will need to be an integral component of a long term general awareness marketing plan.

Regarding the copayment, the Department intends to have the Energy Efficiency Board examine whether it is appropriate to increase the copayment (e.g., to \$99) and/or whether it is appropriate to allow vendors to discount the copayment to compete for market share. The Department also intends to examine whether the EDCs should be allowed to recover the copayment through an on-bill repayment mechanism.

3. Market Based Program

Participants at the Technical Meeting generally believe that because home performance is not commonly understood among market participants that it will be difficult to move HES core services to a market based offering.⁵ Peter Callan from Lantern Energy commented that the Energy Efficiency Board should focus on branding 'home performance' rather than attempting to brand the Fund or energy efficiency in general.

CL&P stated that development of the HES Program vendor market is an ongoing process that continues to require significant oversight by qualified C&LM staff. Oversight is required to ensure program services are properly administered and to address consumer protection concerns. Therefore, while CL&P generally agrees that the HES program should continue to evolve toward a market based program it is inappropriate to dramatically alter or remove program support at this time. CL&P Comments, p. 2.

N2N stated that it is critical that Connecticut truly support and nurture the nascent home performance contracting industry. For too long sudden changes to program budgets has led to an unstable business environment among HES vendors. These companies must have confidence in the sustainability of the program to be willing to invest their own resources in staff, training, and equipment and to achieve increased program goals. The Department and Energy Efficiency Board need to bring vendors into the conversation and understand their business challenges, their barriers to growth, and the tools they need to be more successful and transition to a market based structure. N2N Comments, p. 4.

Since 2007, stakeholders have discussed the need to move HES to a more market based offering. However, because home performance has been an emerging market it has been difficult to do so. Since that time HES has helped to foster some increased demand for these services as well as the development of an educational and

⁴ The copayment for core services should be perceived as the gateway to broader and deeper savings and attractive financing.

⁵ Moving to a market based structure means shifting a program that is dependent on utility customer funding to a self-sustaining industry that can be leveraged by the Energy Efficiency Fund.

training infrastructure for the home performance workforce. As evidenced by the most recent HES RFP, there are now many companies with trained staff in place that can offer these services in Connecticut.

Since home performance is not commonly understood among residential customers this market segment is unaware of the benefits these services provide. As a result, the Department finds that while there is an adequate workforce in place to conduct HES core services, market participants would not demand these services if funding was significantly curtailed or withdrawn. Further, the Department believes that it will take time to develop a market for the core services segment of HES. Therefore, support for the HES program must remain in place as we continue to move core services to a market based structure.

While it remains a challenge to move the HES program core services to a market based offering, the program has tremendous potential to stimulate activity within other, established energy-related market segments such as the insulation, HVAC, solar and solar thermal vendor community. HES must be used to open the door to these opportunities and should be the platform to educate consumers and achieve broader and deeper savings. Therefore, steps must be taken to achieve greater energy savings using current and future HES vendors.

The Department intends to allow the current core services structure of the HES program to remain in place and recommends continued evaluation of moving this program to a market based structure in future C&LM Plan development. The Department also intends to have the Energy Efficiency Board determine whether vendors should be required to achieve savings beyond those delivered through the core services as a condition of continued participation in HES in order to improve the cost-effectiveness of the program.

4. Audit & Tracking Tool

The EDCs currently use a Field Service Tool (FST) to gather energy data from HES participants. The FST is then used to provide information to C&LM administrators to track program activity. This data is also used to provide customers information about their current energy use and the potential to reduce their consumption going forward. The FST has been developed to meet the needs of the HES program as the program has changed to date. Participants at the Technical Meeting discussed the need to modify the FST to meet Connecticut's evolving energy goals.

CL&P stated that the EDCs have solicited feedback from HES vendors regarding the current FST and will meet with them to discuss this issue. In addition, the EDCs have taken steps toward issuance of an RFP for a mobile application to replace the current Excel based tool with a customer dashboard that would provide combined reports for programs, contracts and the Clean Energy Communities Program. CL&P feels that feedback from vendors and the Energy Efficiency Board is necessary to

determine the best vehicle for data collection, project tracking, customer presentation, and utility/program administration and reporting. CL&P Comments, p. 4.

UI stated that the EDCs have been working with the Energy Efficiency Board and their consultants to select an appropriate audit tool and dashboard application. UI suggests that the Department engage the existing process to provide further direction on this initiative. UI Comments, p. 3

The Energy Efficiency Board states that its consultants have been working with the EDCs to develop one or more RFPs for two software tools to support the energy efficiency programs; an HES Audit tool/(FST and a statewide tracking and reporting system (i.e., dashboard) intended for use in all programs, but initially launched under HES. The Energy Efficiency Board recommends that the Department insert itself into the current RFP process. Energy Efficiency Board Comments, p. 2.

N2N requested that the Department and Energy Efficiency Board think strategically about the tools and platforms required to accomplish the state's energy goals. N2N believes that the IT platform for a statewide HES initiative must deliver a better customer experience, provide a more streamlined tool for contractors, support improved data management, facilitate better EM&V and, support private investment for financing. N2N states that it has begun to develop a platform that could be considered in addressing this issue. N2N Comments, p. 2.

Robust data collection and analysis tools are critical to achieving broader and deeper energy savings among the residential sector and in meeting the weatherization goals identified in Public Act 11-80. However, the Department has not had an opportunity to engage in the current process, or conduct a comprehensive review of the current FST, the N2N model or other commercially available tools. An appropriate FST is inextricably linked to moving home performance to a market structure and to achieve increased energy savings goals under HES while a dashboard will help achieve broader goals. Therefore, the Department will engage the existing process to help guide the development of these tools.

5. Funding for Oil Measures

CL&P estimates that revenues under the base funding scenario will support core services for fuel oil customers and add on measures such as insulation, windows, etc., through May 2012. Absent direct fuel oil funding or approval to support fuel oil measures from other revenue sources, a shortfall in HES program activity will exist once oil funding is exhausted. CL&P Comments, p. 4.

NEEP states that customers who heat with oil represent about one half of the residential dwellings in Connecticut. As a result, if a more stable source of funding for these customers is not found Connecticut will be unable to achieve its energy goals. NEEP encourages the Department to engage legislators to create a long-term solution

to this issue by enacting a surcharge on deliverable fuels, as a number of neighboring states are currently considering. NEEP Comments, p. 2.

ENE acknowledges that oil and propane customers are disadvantaged because of limited and dwindling funding sources. Further, the \$500,000 cap on energy efficiency subsidies for oil heat customers that was implemented in Section 132 of Public Act 11-80 severely limits the EDCs' ability to continue to offer energy efficiency services to these customers. Therefore, ENE supports expanded funding for oil and propane customers that will provide stability among the vendor community that serves the residential class. ENE notes the challenge faced by the EDCs in meeting cost effectiveness standards when delivering services to oil heat customers. ENE supports the use of alternate cost effectiveness standards (e.g., the total resource test) to calculate the benefits associated with serving oil and propane customers. ENE Comments, p. 2.

The Department is aware that over 50% of residential customers use oil or propane to heat their homes and that absent funding to address the energy needs of these homes Connecticut cannot meet its aggressive energy goals. The Department is also aware that the ARRA funding used to fund oil measures is ending and that RGGI funds will prove insufficient to fund a robust oil heat efficiency effort in Connecticut. Therefore, to allow more customers to participate in HES the Department will engage with stakeholders to try to develop a consistent approach to funding for oil efficiency.

6. Cost to Provide HES Services

As noted above, the cost to deliver HES core services is approximately \$600 to \$800 per home. To date, a detailed examination of these costs has not been conducted. The Department intends to have the Energy Efficiency Board review these costs as part of its 2013 C&LM Plan review.

7. Weatherization

Section 33(d)(1) requires that the annual C&LM plan include "steps that would be needed to achieve the goal of weatherization of eighty percent of the state's residential units by 2030." The Energy Efficiency Board stated that it is taking steps to define weatherization to assure compliance with the Section 33 requirements going forward. The Department finds that the Energy Efficiency Board's actions comply with the requirements of Section 33.

E. SELF-FUNDING RESIDENTIAL LOANS

Using the C&LM Fund to self-fund⁶ residential energy efficiency loans yields the lowest cost of the program as there is no interest buy down to absorb, while loan losses would continue to be covered. The only cost is the fixed program delivery costs for loan origination and servicing, program marketing and loan loss reserve. If residential

⁶ Self-funding is the direct use of ratepayer funds to create a revolving loan pool.

financing is done through self-funding, it can be structured as a revolving fund that can operate on a breakeven basis (or slightly profitable) and be long-standing.

Self-funding would allow CHIF greater flexibility with loan underwriting terms because it would not be beholden to the conditions imposed by private financial institutions. Also, if a cost effective secondary market develops, existing loans could be sold off and the fund replenished with the net proceeds which CHIF could administer on behalf of the Energy Efficiency Fund. This approach provides effective and responsible stewardship of ratepayer money – Connecticut funds for Connecticut jobs and energy efficiency. CL&P, NEEP and ENE support self-funding of residential energy efficiency loans.⁷ CL&P also supports self-funding of commercial and industrial energy efficiency loans for customers with demands of 200-500 kW. CL&P Comments, p. 4; NEEP Comments, p. 2.

ENE supports self-funding, but believes the Department should work collaboratively with the Energy Efficiency Board and the Board's consultants to determine the amount to be allocated to this effort. ENE Comments, p. 2.

CL&P supports self-funding and indicates that there is approximately \$2 million in the 2012 Base Budget that has been allocated to residential financing. As a result, CL&P requests that it be allowed to spend its 2011 carry over in 2012 and that it not be required to allocate any of the 2011 carry over to self funding. CL&P Comments, p. 2

CL&P also states that the interest rates offered under the current residential financing program relied on a cost of borrowing of approximately 5.5% when screening for cost effectiveness. CL&P continues, indicating that if self-funding provides capital at 0% it can re-evaluate the interest rate that must be charged on qualifying measures to achieve cost effectiveness. Id.

UI states that the use of C&LM revenues should not be viewed as interest free capital. Instead, the Department should determine an appropriate cost of ratepayer funds to allow comparisons between these funds, third party capital, and, funding that will be available through the Clean Energy Finance and Investment Authority (CEFIA). UI Comments, p. 1.

The Connecticut Fund for the Environment (CFE) states that the amount of financing available for investment in energy efficiency must be greatly expanded to reach more customers, provide for greater per unit investment, and, meet the state's aggressive weatherization goals. CFE also urges the Department to explore alternative loan approval standards that would allow more residential customers access to financing for energy efficiency. CFE Comments, p. 2.

⁷ Note that ENE recommends the use of currently available ratepayer funds for a revolving loan pool during the first half of 2012 or at least until loan volumes require participation by third party financial institutions. ENE Comments, p. 3.

The Department supports self-funding of residential energy efficiency loans and believes that steps should be taken to increase the funds available for this initiative. Therefore, in addition to the approximately \$2 million that CL&P has allocated to self-funding in its 2012 Base Budget for residential loans the Department recommends that CL&P be required to allocate \$4 million from its 2011 carry over (a total of approximately \$6 million) and that UI be required to allocate its entire 2011 carry over to self-funding of residential energy efficiency loans. Self-funding for commercial loans has not been reviewed. Therefore, the Department will work with the Energy Efficiency Board to examine whether to self-fund commercial energy efficiency loans.

The EDCs relied on a cost of borrowing of approximately 5.5% when screening for cost-effectiveness and setting interest rates under the current residential financing program. The primary benefit of self-funding is the lower cost of capital associated with the use of ratepayer funds. Therefore, it is appropriate to re-evaluate the interest rates that are being assessed under the current residential financing program to account for the lower costs associated with self-funding.

F. 2011 CARRY OVER

CL&P indicates that it will carry over about \$18 million from its 2011 budget while UI indicates it will carry over about \$600,000. The Companies request that they be allowed to spend the total amount of their respective carry over amounts by June 30, 2012.

As noted above, the Department recommends that CL&P be required to allocate \$4 million from its 2011 carry over and that UI be required to allocate its entire 2011 carry over to self-funding of residential energy efficiency loans. The Department also recommends that CL&P be authorized to spend the remainder of its carryover during 2012.

G. SMARTLIVING CENTER & MUSEUM PARTNERSHIPS

The Energy Efficiency Fund currently operates one SmartLiving Center in Orange, Connecticut which lease expires in March 2013. The Energy Efficiency Fund is also currently involved with innumerable educational activities through their Museum Partnerships. The Energy Efficiency Board was directed to submit a recommendation regarding the continued operation of the Orange facility, expansion of the current center and, the potential to operate an additional facility. The Energy Efficiency Board states:

Connecticut's 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, could 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. 2012 C&LM Plan, p. 258.

Past legislative actions concerning the Energy Efficiency Fund created significant uncertainty about funding levels. In light of this uncertainty, as the Energy Efficiency Board considered past budgets, the SmartLiving Center and Museum Partnerships were considered expendable because these efforts do not drive direct or measurable energy savings. The current administration appears to have eliminated the uncertainty that has plagued the C&LM budget for the past several years. This allows the Energy Efficiency Board to better plan for programs such as the SmartLiving Center and Museum Partnerships. As a result, the Energy Efficiency Board has recommended the continued operation of the Orange facility.

Education will be critical to increasing energy efficiency in Connecticut. Therefore, the Department agrees with the Energy Efficiency Board's recommendation to maintain at least one SmartLiving Center in Connecticut beyond March 2013. However, in light of the aggressive energy efficiency goals identified in Public Act 11-80 the Board should consider whether to relocate/expand the current center, whether to construct a second facility and/or whether to expand the role of the center to provide more do-it-yourself training in say an 'energy lab' atmosphere. As an alternative to constructing such a training facility the Board should investigate whether to use energy efficiency training facilities that have already been constructed in Connecticut. The Department intends to have the Energy Efficiency Board review these issues as part of its 2013 C&LM Plan review.

H. §101 PUBLIC ACT 11-80 - EQUITABLE DISTRIBUTION OF C&LM FUNDS

Section 101 of Public Act 11-80 requires that before approving any plan for energy conservation and load management and renewable energy projects, the Department must determine that an equitable amount of the funds administered by each entity will be deployed among small and large customers in census tracts in which the median income is not more than 60% of the state median income, for customers whose average maximum demand is 100 kilowatts or less. The Department must determine such equitable share. Projects may include a mentoring component for such communities. The requirements apply to submissions issued to the Department by ECMB, the board of directors of the Clean Energy Finance and Investment Authority (CEFIA), or an electric company.

CL&P and UI provided charts and data regarding the budgets and revenues by customer class which was included in the 2012 Conservation Plan. See, Table A, pp. 27 & 37. The data indicates that the Energy Efficiency Board has done a good job ensuring that spending matches reserves for each customer class.

The EDCs were unable to provide the information by census tract but have provided 2010 data according to the economically distressed municipality guidelines of the Department of Economic and Community Development. For 2010, 25 towns were considered distressed. The information provided for each town detailed the revenues collected from the 3 mill/kWh assessment for customers with demands of under 100kW

and over 100kW, for the residential, commercial and industrial classes and the incentives for each. Economically disadvantaged areas in 2010 had a total of \$24,739,491 collected from the 3 mill/kWh assessment and incentives in these same areas of \$24,014,716. The data demonstrates that there is equitable distribution of funds.

The data also revealed that in a total of 25 distressed towns, ten of the towns had incentives that actually exceeded collections. Of the remaining 15 distressed towns or cities, three had incentive levels that were only slightly less than collections. In UI's service territory, the cities of New Haven and West Haven had incentive levels that were 32.13% and 12.92% lower, respectively, than the amount collected. For CL&P, the towns of North Canaan, Sprague and Brooklyn had incentive levels that were significantly lower than the 3 Mill collections. Additional outreach efforts are recommended to both UI and CL&P in those distressed towns to increase awareness of available incentives.

There is also a jobs mentoring component of this section of the Act. The Department will be organizing a technical meeting in the near future in conjunction with the Energy and Technology Committee, the utilities, the OCC and other interested parties to discuss scope of the mentoring program. The Department sees this as an important opportunity to create a jobs initiative in economically disadvantaged areas.

I. C&I PROGRAM ISSUES

At the Technical Meeting, the Department indicated that it has additional C&I program issues that it intends to address during 2012. These issues are as follows:

1. Availability of funding to determine the baseline compliance to the Connecticut building code;
2. Building Code training goals, priorities and implementation for 2012;
3. 2012 Plan performance incentive matrix for performance contracts and comprehensive projects;
4. Delivery of gas saving measures in the Small Business Energy Advantage program;
5. Metrics for measurement and verification of savings from LEED certified buildings and from changes in individual or organizational behavior and decision-making from the Business and Energy Sustainability program; and,
6. Institute for Sustainable Energy training, if any, to municipalities and health care facilities in 2012, as approved in the Decision in Docket No. 10-10-03.

The Department looks forward to clarifying these issues and working with the Energy Efficiency Board on these and other C&I program issues.

III. SUMMARY OF RECOMMENDATIONS

1. 2012 Budget & Spending

1. The EDCs should be authorized to maintain 2012 program spending at a level that is at least commensurate with 2011 spending levels;
2. CL&P, in consultation with the Energy Efficiency Board, should be authorized to expend its remaining carry over balance (after allocating to direct-funding of residential loans) during 2012;
3. The EDCs should be authorized to use up to 25% of anticipated C&LM revenues from 2013 to meet 2012 program demand;
4. PURA should consider rescinding the directives imposed on the EDCs in the Decision dated June 19, 2008, in Docket No. 07-10-03 at page 6 which constrain program spending; and,
5. PURA should consider rescinding Order No. 13 in the Decision dated March 17, 2010, in Docket No. 09-10-03, which limits oil spending for income-eligible customers.

2. HES Copayment

The Department intends to have the Energy Efficiency Board examine whether it is appropriate to increase the copayment (e.g., to \$99) and/or whether it is appropriate to allow vendors to discount the copayment to compete for market share. The Department also intends to have the Energy Efficiency Board examine whether it is appropriate to recover the copayment through an on-bill repayment mechanism.

3. HES – Market Based Structure

The Department intends to allow the current core services structure of the HES program to remain in place and continue to gradually move this program to a market based structure. The Department also intends to have the Energy Efficiency Board determine whether vendors should be required to achieve savings beyond those delivered through the core services as a condition of continued participation in HES to improve the cost-effectiveness of the program.

4. HES Audit & Tracking Tool

An appropriate Field Service Tool (FST) and other tracking software are inextricably linked to moving home performance to a market structure and to achieving the numerous other goals for HES identified by N2N. Therefore, the Department will engage the existing process to help guide the development of these tools.

5. Funding for Oil Measures

To allow more customers to participate in HES the Department will engage with stakeholders to try to develop a consistent approach to funding for oil efficiency.

6. HES - Cost to Provide Core Services

As noted above, the cost to deliver HES core services is approximately \$600 to \$800 per home. The Department intends to have the Energy Efficiency Board review these costs as part of its 2013 C&LM Plan review.

7. Self Funding Residential Loans

The Department recommends that in addition to the approximately \$2 million that CL&P has allocated to self-funding in its 2012 Base Budget for residential loans CL&P be required to allocate \$4 million from its 2011 carry over (a total of approximately \$6 million) and that UI be required to allocate its entire 2011 carry over to self-funding of residential energy efficiency loans. Further, it is appropriate to re-evaluate the interest rates that are being assessed under the current residential financing program to account for the lower costs associated with self-funding.

Self-funding for commercial loans has not been examined. Therefore, the Department will work with the Energy Efficiency Board to examine whether to self-fund commercial energy efficiency loans.

8. Carry Over

The Department recommends that CL&P be required to allocate \$4 million from its 2011 carry over and that UI be required to allocate its entire 2011 carry over to self-funding of residential energy efficiency loans. The Department also recommends that CL&P be authorized to spend the remainder of its carry over during 2012.

9. SmartLiving Center

The Department intends to have the Energy Efficiency Board review issues surrounding the SmartLiving Center as part of its review of the 2013 C&LM Plan.

IV. APPROVAL

The Department hereby approves the 2012 Base Plan for Electric Conservation and Load Management, subject to modifications set forth herein.