Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
Bureau of Energy and Technology Policy

Proposed Determination to Approve 2012 Conservation and Load Management Plan Expanded Budget

JUNE 5, 2012
DRAFT FOR PUBLIC COMMENT

DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
Bureau of Energy and Technology Policy (BETP)

Proposed Determination to Approve 2012 Conservation and Load Management Plan, Expanded Budget

SUMMARY

Conservation and load management budgets and programs are reviewed and approved pursuant to General Statutes of Connecticut §16-245m, as amended by Section 33 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 Department has reviewed the 2012 base C&LM Plan (Base Plan), and issued its Final Determination on the Base Plan on February 17, 2012. In this determination, the Commissioner of the Department of Energy and Environmental Protection (DEEP) proposes to approve an expanded budget for the 2012 Conservation and Load Management Plan of $158.4 million. DEEP also proposed to approve the programs submitted by the electric distribution companies in consultation with the Energy Efficiency Board subject to the modifications and conditions discussed herein. The expanded budget, together with the base budget approved by DEEP in the Base Plan, would fund the acceleration and expansion of these programs, so as to ultimately put Connecticut on the path to achieving all cost-effective energy efficiency identified in the draft Integrated Resources Plan for 2012-2013.

COMMENTS INVITED

All interested persons are invited to present their views regarding the proposed determination. Written comments may be filed directly to DEEP's Bureau of Energy and Technology Policy (BETP) website at http://www.ct.gov/deep/cwp/view.asp?a=4120&q=493990. Comments must be received on or before June 19, 2012. Copies of this proposed determination are available for public inspection during normal business hours at the Department of Energy and Environmental Protection's Bureau of Energy and Technology Policy, 10 Franklin Square, New Britain, CT. A link to the proposed determination is available on DEEP's website at: http://www.dpuc.state.ct.us/DEEPEnergy.nsf/$EnergyView.

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BACKGROUND INFORMATION

Statory Authority

Electric distribution companies (EDCs) are required under section 16-245m of the Connecticut General Statutes to develop a comprehensive conservation and load management plan (C&LM Plan) to guide the implementation of cost-effective energy conservation programs. An Energy Conservation Management Board was established to advise and assist the EDCs with the development and implementation of comprehensive conservation and load management programs, which were subject to the approval of the former Connecticut Department of Public Utility Control. These programs have been supported by the Energy Conservation and Load Management Fund, which is funded by a $0.003/kWh charge assessed to all end-use electric customers.

The process for development and approval of C&LM Plans was modified in July 2011 with the enactment 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 (Act). Pursuant to the Act, the Energy Conservation Management Board—renamed the Energy Efficiency Board (EEB)—continues to advise and assist the EDCs with the development and implementation of C&LM plans. The Act also assigned responsibility to DEEP to review the C&LM Plan, including the cost-effectiveness of proposed programs, and to modify or terminate programs that are determined to fail the cost-effectiveness test. The Act further authorized DEEP to approve, modify, or reject the C&LM Plan in an uncontested proceeding.[1] Relatedly, the Act charged DEEP with developing an Integrated Resources Plan (IRP) on a biennial basis, to review the state's energy and capacity resource assessment and to develop a plan for the procurement of energy resources that addresses, among other things, how best to eliminate growth in electric demand, as well as approaches to maximizing the impact of demand-side measures.[2]

Any disbursements from the Energy Conservation and Load Management Fund by the EDCs to carry out the base budget in the C&LM Plan must be authorized by PURA.[3] To the extent that the budget for the C&LM Plan may call for funding energy conservation programs at a level exceeding the amount of funding available in the Energy Conservation and Load Management Fund, any additional collection of funds from ratepayers would also be subject to PURA authorization. In exercising that authority the Act stated that PURA's decisions shall be "guided by" the goals of DEEP, including the IRP approved by DEEP.[4]

[1] *See* 2012 Supplement to the Connecticut General Statutes, §§16-245m (d)(1) & (d)(3).
[2] *Id.* §§16a-3a (b) & (d).
[3] §16-245m (b).
[4] §16a-3a (h).

Approval of 2012 Conservation and Load Management Base Budget

On September 30, 2011, the Energy Efficiency Board submitted to the Department the 2012 Electric and Natural Gas Conservation and Load Management Plan (2012 C&LM Plan).[5] The 2012 C&LM Plan represents the thirteenth plan prepared by the EDCs since passage of Public Act 98-28 and the seventh plan filed by the natural gas companies since passage of Public Act 05-01. The electric portion of the 2012 C&LM Plan was developed in two parts: (1) a Base Plan funded by a budget of $105.6 million derived from the current $0.003/kWh assessment and other conservation related funding (e.g. revenue from the sale of renewable energy credits) (Base Budget), and (2) an Expanded Plan supported by an additional $113.3 million budget to accelerate energy savings and achieve all cost-effective energy efficiency (Expanded Budget). DEEP initiated an uncontested proceeding to review the base and expanded budgets in two phases.

First, in a Determination dated February 17, 2012, the Department approved the 2012 Base Budget of $105.6 million. The Base Budget would allocate $84.2 million to conservation programs administered by the Connecticut Light and Power Company (CL&P) and $21.4 million to the United Illuminating Company (UI). Also in that Determination, the Department concluded that the EDCs should be allowed to maintain 2012 C&LM spending at 2011 levels, or approximately $124.7 million.[6] To achieve the 2011 level of spending, in addition to the Base Budget of $105.6 million, the Department determined that CL&P should be allowed to spend $14 million in 2011 carryover funds, and that the EDCs should be allowed to spend, in 2012, up to 25% of their projected 2013 revenues from the Energy Conservation and Load Management Fund. In total, the Department approved total 2012 program spending of up to $145.9 million. As part of its approval of the Base Budget, the Department modified the 2012 C&LM Plan to allocate $4.6 million to the self-funding of residential loans.

It is important to note that the amounts listed for the 2012 Base Revenues reflect funds recovered through electric rates (i.e., the $0.003/kWh assessment and other C&LM-related revenues) during the current program calendar year (2012), while carryover and forward spending amounts are derived from funds collected from the $0.003/kWh assessment outside the current program calendar year. Authorization of expenditures from the Energy Conservation and Load Management Fund for the 2012 C&LM Base Plan is now under consideration at PURA under Docket No. 12-02-01.[7]

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[5] *See* 2012 C&LM Plan, *available at* http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/2fa1f8d01cfc0cc785257981007276d4/$FILE/2012%20CLM%20Electric%20and%20Gas%20Plan%20FINAL.pdf.

[6] *See* DEEP Base Plan Determination at 7, *available at* http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/2fa1f8d01cfc0cc785257981007276d4/$FILE/2012%20CLM%20Electric%20and%20Gas%20Plan%20FINAL.pdf *and* Addendum to DEEP Base Plan Determination, *available at* http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/2b676422fd385d94852579a7005aa31c/$FILE/Addendum%20to%20CLM%20Base%20Plan%202-22-12.pdf.

[7] All documents in Docket No. 12-02-01 can be found on the PURA website at: http://www.dpuc.state.ct.us/dockcurr.nsf/(Web+Main+View/All+Dockets)?OpenView&StartKey=12-02-01.

Summary of the Proposed 2012 Conservation & Load Management Plan Expanded Budget

The Expanded Budget proposed by the EDCs and submitted by the EEB for the 2012 Conservation and Load Management Plan consists of expenditures for energy efficiency programs above those approved in the Base Plan for 2012. Overall, the Expanded Budget proposed to increase program spending above the Base Plan by $113.3 million in 2012, with the combined expenditures under the Base and Expanded Budgets totaling $218.9 million. In submitting the 2012 C&LM Plan, the EEB proposed that $17 million of the revenues for the Expanded Budget should be collected through the sale of fuel oil, although fuel oil funding is not available at this time. The EEB further proposed that the remaining 85% of the Expanded Budget, or about $96.3 million, should be recovered through a Conservation Adjustment Mechanism (CAM) or other rate adjustment on electric bills. The proposed Expanded Plan supports electric savings that are nearly twice those that would be achieved under the 2012 Base Plan.

SIGNIFICANT PUBLIC COMMENTS

The Department conducted one technical meeting on February 10, 2012, and received written comments on the 2012 C&LM Expanded Budget. The Department received six public comments on the Expanded Plan, representing the views of the following entities: Connecticut Industrial Energy Consumers (CIEC), CL&P, Environment Northeast (ENE), the Office of Consumer Counsel (OCC), UI, and the Connecticut Fund for the Environment (CFE). All written comments submitted on the 2012 C&LM Expanded Budget, and a recording of the February 10, 2012 technical meeting are available on the DEEP website.[8]

This section contains a summary, organized by topic, of major comments and DEEP's responses, and the rationale for changes made to the 2012 Expanded Budget. In some cases, DEEP received also comments in the Integrated Resource Plan (IRP) proceeding that addressed the 2012 Expanded Budget. The Department has therefore also included below a summary of IRP comments that are relevant to the Expanded Plan.

A. Expanding the C&LM Budget

CL&P, UI, and ENE all submitted comments supporting an increase in electric rates to fund the Expanded Budget. Commenters cited different reasons for supporting expanded efficiency. Several commenters on the draft IRP, including ENE, the Sierra Club, and CFE, highlighted economic benefits of the Expanded Plan, such as direct and indirect job creation, increased local spending as the result of reduced energy costs, and increasing Connecticut's competitiveness. ENE cited its own 2009 study, which estimated that the Expanded Plan would increase Gross State Product by $61 million and job years by 3,900 over the Base Plan. CFE

[8] Written comments are available at http://www.dpuc.state.ct.us/DEEPEnergy.nsf/$EnergyView?OpenForm&Start=1&Count=30&Expand=4.3&Seq=5. The recording of the technical meeting is available at http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/419208cb6767d97d852579a4004928c8?OpenDocument.

stated that a higher commitment to energy efficiency would provide a significant boost to the state's economy by keeping consumer dollars in the state rather than spending them on imported fuel.

Other commenters emphasized environmental and human health benefits as their motivation for supporting an increase in Connecticut's energy efficiency requirements to attain all cost-effective energy savings. In comments on the draft IRP, the Sierra Club, for example, emphasized that enhanced C&LM programs will reduce reliance on old and highly polluting coal and oil plants, and facilitate the transition to cleaner energy resources by obviating the need for the oldest and least clean power plants in Connecticut.

In comments submitted in the IRP proceeding, ENE pointed out that the Expanded Plan would maintain or decrease Connecticut's load share with regard to ISO-NE transmission tariffs. ENE also strongly supported DEEP approval of the Expanded Budget because it is consistent with the requirement in Conn. Gen. Stat. 16a-3a. ENE points out that the draft IRP's recommendations and interpretations of all cost-effective energy efficiency are inconsistent with rulings set forth in DPUC Final Decisions for IRPs initiated prior to legislative changes to the process in P.A. 11-80. ENE urged DEEP to consider clearly enunciating whether it would recommend that PURA rescind relevant portions of past IRP Final Decisions that are inconsistent with new State policy. Relatedly, Clean Water Action requested that DEEP endorse full funding for all cost-effective energy efficiency as the only scenario that achieves the statutory requirement to maximize demand side management impact and minimize environmental impacts at negative cost.

DEEP agrees that energy efficiency offers significant benefits and should be expanded. The draft 2012 IRP recommends that Connecticut pursue all cost effective conservation. More conservation will provide significant savings to customers, by helping reduce their electric bills. As noted in the draft 2012 IRP, a sustained commitment to delivering energy efficiency programs at the all cost-effective level (consistent with the Expanded Budget) is expected to create 5,500 jobs in Connecticut by 2022. Additional conservation can also provide benefits to the electric system, the environment and the local economy.

As described in the Proposed Determination below, DEEP agrees with ENE that approval of the Expanded Budget is supported by the statutory requirement, set forth in Section 16a-3a of the General Statutes of Connecticut, that "resource needs shall first be met through all available energy efficiency and demand resources that are cost-effective, reliable and feasible." DEEP also believes that the approval of the Expanded Budget is necessary to achieve the goals set forth in Public Act 11-80 for the newly-created Department of Energy and Environmental Protection, which include reducing rates and decreasing costs for Connecticut's ratepayers. Approval of the Expanded Budget is also needed to comply with requirements in Public Act 11-80 that mandate weatherization of 80% of the residential units in Connecticut by 2030, and the requirement to reduce energy use in state-owned or leased buildings by 10% by January 1, 2013 and another 10% by 2018.

B. Cost-Effectiveness

During the course of this proceeding some commenters recommended that DEEP change the cost effectiveness screening tests to evaluate the programs to be funded by the Expanded Budget. Like the former DPUC before it, DEEP primarily uses the Electric System Test and also reviews the results of the Total Resource Test to screen electric conservation programs. The primary reason to use the Total Resource Test as the primary test or another test would be to include oil savings as a benefit. Doing so would make oil measures cost effective and justify electric spending on oil measures. Therefore, at this time, DEEP has determined not to change the cost effectiveness screening tests to evaluate the programs to be funded by the Expanded Budget. DEEP encourages all parties to work together to secure funding from oil customers or pursue other non-electric options to fund oil conservation measures. Additional funding is needed to meet the weatherization goals outlined in Public Act 11-80. Oil funding would help increase conservation budgets to meet this objective and allow conservation to be implemented more cost effectively on a fuel blind basis to all Connecticut residents. This is the fairest method and will have the least impact if the costs are spread across all oil, natural gas and electric customers.

C. Feasibility of Ramp Up

The Department did not receive any comments opposed to pursuing additional conservation per se, but some commenters expressed concern about how additional conservation should be implemented. In comments submitted on the IRP, Northeast Energy Efficiency Partnerships (NEEP) supported the Expanded Plan and higher participant contributions to extend program dollars, but cautioned that this strategy must be applied carefully so as to not undermine program accessibility and savings goals. AARP emphasized that the expansion of energy efficiency programs should be funded in a manner that ensures reasonable rates and bills. Thus, annual budgets for energy efficiency should be set in a manner that balances the pace at which all cost-effective energy efficiency is achieved, i.e. the quantity achieved each year, with impacts on rates and the bill impact on residential customers.

The Office of Consumer Counsel (OCC) indicated support for expanding energy efficiency programs, but expressed concern about the level and structure of any rate increase used to fund the program expansion. OCC urged DEEP to increase program budgets by no more than 50% in 2012 and maintain the same budget in 2013, in order to ensure that a high degree of program quality (vendors, staff, equipment, etc.) is maintained during the ramp up, and to facilitate customer buy-in for financing and performance contracting. OCC also requests that a program monitoring be instituted to track whether the anticipated savings of the programs are being achieved.

DEEP agrees that the level of authorized program spending under the Expanded Plan should be carefully controlled to ensure that program quality and cost-effectiveness are maintained during the ramp up. After considering the comments, DEEP requested additional data from the EDCs about the level of actual spending the EDCs could deliver during the ramp up in the remaining months of 2012 while still maintaining the quality and effectiveness of programs. Based on this information, and as discussed in more detail in the Draft Determination below, DEEP proposes to approve a total budget of $158.4 million for the Expanded Conservation programs for 2012, rather than the $218.9 million proposed by the EEB and EDCs. This adjusted budget requires an increase in revenues of 34.2 million in 2012, rather than an increase of $96.3 million. DEEP believes that this level of funding will allow programs to ramp up at a reasonable pace to ensure that program quality and customer satisfaction are maintained. DEEP also conditioned its approval for the residential programs on the achievement of several milestones—including the development of a field service tool and the promulgation of a definition of weatherization—that will improve the overall cost-effectiveness of those programs. In addition, as programs ramp up, the EDCs will be required to provide quarterly reporting on customer participation, program activity and cost-effectiveness.

D. Residential Programs

DEEP received several comments raising concerns and suggesting improvements to the residential programs that would be funded by the Expanded Budget. In comments submitted in the IRP proceeding, the Connecticut Business and Industry Association (CBIA) recommended that Connecticut allow more vendors to participate in the delivery of residential energy efficiency services. Compared to Massachusetts and Oregon, where there are thousands of vendors, CBIA observed that Connecticut has constrained the number of businesses that deliver these services. CBIA notes that, while it was necessary to limit the number of vendors at the outset when C&LM programs were being developed, substantial transformation of Connecticut's energy efficiency potential will require deploying energy performance specialists in far greater numbers than at present. DEEP shares CBIA's concern and is exploring options to expand the number of businesses that can deliver residential energy efficiency services, while at the same time ensuring consistent quality performance across all vendors.

The Connecticut Fund for the Environment (CFE) submitted comments advocating that the amount available for residential self-funding should be increased and that a customer's history of bill repayment should be used as secondary underwriting criteria to qualify applicants in the event that they do not meet more stringent FICO and debt-to-income standards. After considering CFE's comments, and as discussed below, DEEP has determined to increase the allocation for residential self-funding in the residential portion of the Expanded Budget, from $12.6 million to $17.1 million. DEEP believes that demand for residential financing will increase under the Expanded Budget, based in part on the experience of the Financing Pilot conducted by the EDCs between June 2010 and May 2011, and on the projected impact of a comprehensive marketing effort being planned to stimulate interest in energy efficiency and drive C&LM program participation across Connecticut.

E. Commercial and Industrial Programs

CIEC submitted comments requesting that DEEP authorize a self-directed energy efficiency pilot for large customers. In support of this request, CIEC cited a study by the American Council for an Energy Efficient Economy (ACEEE) on self-directed programs.[9] These programs generally allow large commercial and industrial (C&I) customers to self-direct a portion or all of their C&LM charges, customizing energy efficiency investments, and thereby

[9] Anna Chittum, *Follow the Leaders: Improving Large Customer Self-Direct Programs,* ACEEE, October 2011.

circumventing the "cookie cutter" programs designed for high volume delivery to businesses. In their written comments, CIEC submitted an outline for a self-directed pilot program.

DEEP notes that both the Energy Conscious Blueprint and the Energy Opportunities programs in the C&LM Plan offer incentives for customized efficiency investments. However, there may be merit to exploring customer-directed program delivery that applies to very large C&I customers who are very knowledgeable about energy management. DEEP has determined not to modify the proposed C&I programs at this time to require a self-directed energy efficiency pilot for large consumers. However, as discussed herein, the Energy Efficiency Board should review existing programs and potential enhancements for large customers' energy investments and determine whether self-directed programs would better serve this customer class.

In its written comments, CIEC also requested that DEEP remove incentive caps for C&I programs. CIEC asserted that removal of incentive caps will stimulate a greater level of participation and customer benefits because projects will not be unnecessarily delayed by the restrictions imposed under current program caps. CIEC also stated that lifting the caps would assure that larger industrial customers can equitably expend their individual contribution to the C&LM Fund. In the Addendum to the Base Plan Approval, dated February 22, 2012, DEEP recommended that PURA raise the C&I customer cap from $750,000 to $800,000 per federal tax identification number (Tax I.D.) and eliminate the per metered site cap of $300,000. As described below, DEEP finds that, at the Expanded Plan funding level, the annual cap should be raised from $800,000 to $1.5 million and the per metered site cap should be eliminated. An annual cap of $1.5 million per Tax I.D. is appropriate, will allow flexibility for larger multi-year projects, and will assure that the greatest number of C&I customers are serviced under the C&LM programs. The Department recommends an annual incentive cap, which would not impose restrictions for large C&I customers to receive incentives in future years. The Energy Efficiency Board should evaluate the appropriateness of the $1.5 million cap after the first year of the Expanded Plan.

F. Revenue Recovery Mechanisms

DEEP received several comments addressing the type of funding mechanism that should be used to support the Expanded Plan. None of the commenters recommended or identified non-electric ratepayer funding options to support increased C&LM budgets. CL&P submitted comments proposing the use of a CAM with lost revenue recovery to fund the Expanded Plan. In support of its proposal, CL&P cited PURA's approval of a CAM for Yankee Gas, which includes a sales adjustment provision.[10] CL&P's proposal would use a CAM to fund all annual incremental program costs, including company performance incentives, in excess of C&LM base rate recovery (i.e., the $0.003/kWh assessment) and revenues received from other sources such as Regional Greenhouse Gas Initiative (RGGI) dollars and the ISO-NE Forward Capacity Market. The CAM would be trued up annually to reconcile lost revenues associated with lost sales from the increased C&LM activities. This model would provide CL&P with incremental lost revenue recovery for all conservation-related program savings (kWh and kW) by rate class,

[10] The Department approved the implementation of a CAM for each LDC by Decisions dated August 23, 1995 in Docket No. 93-02-04, Application of Connecticut Natural Gas Corporation to Amend Its Rate Schedules: Reopened; Docket No. 92-02-19, Application of Yankee Gas Service Company to Increase Its Rate and Charges: Reopened; and Docket No. 93-03-09, Application of the Southern Connecticut Gas Company to Increase Its Rates and Charges: Reopened (CAM Decision).

and tariff charges would be applied to compute lost distribution revenue. CL&P believes the C&LM performance incentive and a lost revenue recovery mechanism are mutually exclusive; therefore, CL&P believes it would be entitled to both.

ENE and NEEP also submitted comments recommending the use of a CAM to support the Expanded Plan. Regarding implementation of the CAM, ENE does not believe that the EDCs should receive compensation for the lost revenues associated with energy efficiency. However, because decoupling is not uniformly applied to UI and CL&P—UI has decoupling while CL&P does not — ENE acknowledges that DEEP may need to address this inconsistency by implementing separate mechanisms for each EDC. NEEP supports implementation of a CAM, as well as full decoupling to remove any EDC disincentive to promoting efficiency. With respect to the CAM, the Connecticut Energy Advisory Board notes that the C&LM charge would immediately double for ratepayers and would remain in effect for at least the next decade if the Expanded Plan is immediately funded and if that provision remains in the final 2012 IRP.

OCC expressed concern that the proposal to increase electric rates to fund the Expanded Budget should not be considered piecemeal or in isolation, but should be reviewed in the context of other energy-related programs (such as the LREC-ZREC program) that will also require a rate increase to support this program.

DEEP considered several funding mechanisms to support the Expanded Plan and Budget. These mechanisms included a direct increase in the current \$0.003/kWh assessment; an authorization to allow the EDCs to include energy efficiency in their rate base; and, the implementation of a CAM. All of these methods would require funding by electric ratepayers. For the reasons described in the Proposed Determination below, DEEP recommends that a CAM be implemented to increase funding for the Expanded Plan. This will allow the costs to be collected as they are incurred, and will allow revenues to be regularly trued up to actual expenditures. In response to the comments of the Connecticut Energy Advisory Board, the use of a CAM allows for careful control of the pace at which program spending increases.

Due to the significant increase in C&LM spending and the associated energy savings, DEEP also recommends that a lost sales adjustment is included in the CAM for CL&P. Ultimately, the decision as to whether a particular mechanism is appropriate must be decided by PURA, in accordance with its statutory authority and procedural requirements.[11]

With respect to the OCC's comments, DEEP's goal is to expand energy conservation program activity while minimizing rate impacts. Overall electric rates have declined each year since 2010. As discussed in the draft 2012 IRP, it is expected that even with the increase necessary to fund the Expanded Plan overall rates will be flat or decline again in 2013. A full report analyzing all rate components is being developed in response to Section 90 of Public Act 11-80.

[11] *See, e.g.*, Conn. Gen. Stat. §16-19b(c).

G. Customer Equity

In comments submitted on the IRP, several commenters expressed concerns or offered suggestions about how to ensure equitable funding of, and participation in, the expansion of energy efficiency programs. AARP expressed concern that the expansion of energy efficiency should be achieved through policy approaches that maximize participation among the majority of customers, especially low-income individuals, senior citizens, and residential renters. Comments submitted by the Connecticut Energy Advisory Board also expressed concern that ratepayers who are not homeowners are unable to take advantage of benefits offered under the C&LM programs. DEEP shares these concerns and has considered, as part of its review of the 2012 C&LM Plan, whether energy efficiency programs are designed and implemented to achieve equitable participation among all customer classes. Expansion of existing programs will provide a greater opportunity for all customers to participate.

AARP also highlighted statutory requirements under Public Act 11-80 that specify that efficiency be achieved in a manner that ensures equity in benefits and cost reduction for all customer classes, and expressed concern that the necessary analysis to comply with these requirements has not been done. DEEP does not agree. As discussed in the proposed decision below, DEEP has reviewed the C&LM Budget and Parity Analysis submitted with the C&LM Plan, and has determined that program budgets for each customer sector in the Expanded Plan closely match the revenues collected for the respective customer sector.

H. Cost Allocation to Customer Classes

The Connecticut Industrial Energy Consumers (CIEC) submitted comments encouraging the expansion of energy efficiency opportunities, but expressed concern about the potential adverse impacts of increased C&LM funding on electric delivery rates, system reliability, the ability of existing businesses to continue operating economically in the State, and the attraction of new businesses to Connecticut. Accordingly, the CIEC urged DEEP to reject the recovery of Expanded Budget funds through a purely volumetric surcharge, which CIEC believes is inconsistent with cost-causation principles and is likely to disproportionately impact large customers, and to reject the continued implementation of incentive caps for energy efficiency programs. CIEC states that large C&I customers comprise 0.00013% of total customers; C&I customers are allocated approximately 4% of the total plan budget, and yet contribute 57% of the lifetime savings achieved by the energy efficiency programs. To alleviate the excessive burden on large C&I customers, CIEC urges the Department to adopt a fixed charge recovery for the expanded budget revenue collection, or a combination of fixed and volumetric charges for C&I customers.

DEEP recognizes the costs that are imposed on large C&I customers by the current $0.003/kWh assessment and believes that doubling the cap to $1.5 million (which can be accessed annually), and eliminating the per meter charge, will enable large customers to recover the moneys contributed to the C&LM fund. Very large or comprehensive projects often extend for more than one year from start to finish; the C&LM fund allows the annual caps to extend over more than one year, which offers greater flexibility to finance these projects. Therefore, DEEP would retain the volumetric charges, in conjunction with the larger annual caps.

PROPOSED DETERMINATION

I. INTRODUCTION

Electric distribution companies (EDCs) are required under Section 16-245m of the Connecticut General Statutes to develop a comprehensive conservation and load management plan (C&LM Plan) to guide the implementation of cost-effective energy conservation programs. Section 16-245m directs the Energy Efficiency Board (EEB) to advise and assist the electric distribution companies in the development and implementation of the C&LM Plan, and assigns responsibility to the Department of Energy and Environmental Protection (DEEP) to review the C&LM plan, including the cost-effectiveness of proposed programs, and to approve, modify, or reject the C&LM plan in an uncontested proceeding.[12]

On September 30, 2011, the Energy Efficiency Board submitted to the Department the 2012 Electric and Natural Gas Conservation and Load Management Plan (2012 C&LM Plan).[13] The electric portion of the 2012 C&LM Plan included a Base Plan funded by a budget of $105.6 million derived from the current $0.003/kWh assessment and other conservation-related funding, (e.g. revenue from the sale of renewable energy credits) (Base Budget) and an Expanded Plan supported by an additional $113.3 million budget to accelerate energy savings and achieve all cost effective energy efficiency (Expanded Budget). DEEP initiated an uncontested proceeding to review the base and expanded budgets in two phases.

First, in a Determination dated February 17, 2012, the Department approved the 2012 C&LM Plan Base Budget of $105.6 million.[14] As part of that Determination, DEEP concluded that the EDCs should be allowed to maintain 2012 C&LM spending at 2011 levels, or approximately $124.7 million, by allowing the Connecticut Light and Power Company (CL&P) to spend $14 million in 2011 carryover funds; by allowing the EDCs to allocate $4.6 million to the self-funding of residential loans; and, by allowing the EDCs to spend, in 2012, up to 25% of their projected 2013 revenues from the Energy Conservation and Load Management Fund.[15] In total, the Department approved total 2012 spending of up to $145.9 million, as summarized in Table 1, below.

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[12] *See* 2012 Supplement to the Connecticut General Statutes, §§16-245m (d)(1) & (d)(3).
[13] 2012 C&LM Plan, *available at* http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/2fa1f8d01cfc0cc785257981007276d4/$FILE/2012%20CLM%20Electric%20and%20Gas%20Plan%20FINAL.pdf.
[14] 2012 Base Revenues reflect funds recovered through electric rates (i.e., the $0.003/kWh assessment and other C&LM-related revenues) during the current program calendar year, 2012, while carry over and forward spending amounts are derived from funds collected outside the current program calendar year.
[15] *See* DEEP Base Plan Determination at 7, *available at available at* http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/2fa1f8d01cfc0cc785257981007276d4/$FILE/2012%20CLM%20Electric%20and%20Gas%20Plan%20FINAL.pdf *and* Addendum to DEEP Base Plan Determination, *available at* http://www.dpuc.state.ct.us/DEEPEnergy.nsf/c6c6d525f7cdd1168525797d0047c5bf/2b676422fd385d94852579a7005aa31c/$FILE/Addendum%20to%20CLM%20Base%20Plan%202-22-12.pdf.

Table 1

2012 Approved C&LM Spending			
	CL&P	UI	Total
2012 Base Revenues	$84,191,749	$21,370,000	$105,561,749
2011 Carry Over	$14,000,000	-	$14,000,000
2013 Forward Spending*	$21,047,937	$5,342,500	$26,390,437
TOTAL	**$119,239,686**	**$26,712,500**	**$145,952,186**

* Estimated as 25% of 2012 Base Revenues
In addition to total spending DEEP allocated $4.6 million to self-funding of residential loans.

Authorization of expenditures from the Energy Conservation and Load Management Fund to implement the 2012 C&LM Base Plan is currently under consideration at PURA under Docket No. 12-02-01.

The Expanded Budget submitted by the EEB proposes to increase program spending in 2012 by $113.3 million above the Base Budget to significantly expand the current C&LM program offerings in order to deliver all cost effective energy savings. The Expanded Plan would deliver electric savings that are nearly twice those that would be achieved under the 2012 Base Plan.[16] Table 2 provides a program-by-program comparison of the 2012 Base and Expanded Budgets. As the table shows, the combined expenditures under the Expanded Budget proposed by the EDCs and EEB would total $218.9 million. The EEB proposed that $17 million of the additional $113.3 million in funding be collected through the sale of fuel oil, and that the remaining 85%, or about $96.3 million, should be recovered through a Conservation Adjustment Mechanism (CAM) or other rate adjustment on electric bills. The Department now, in this determination, reviews, modifies, and approves the 2012 C&LM Plan Expanded Budget, as described below.

[16] See, 2012 C&LM Plan, Table B for CL&P @ pp. 28 and 354 and Table B for UI @ pp. 38 and 366.

Table 2

Comparison - 2012 Base vs. Expanded Budgets			
Energy Efficiency Programs	**2012 Base**	**2012 Expanded**	**Proposed Increase**
RESIDENTIAL			
Residential Retail Products	$ 6,605,855	$ 14,405,304	$ 7,799,449
Appliance Rebate Program	$ -	$ 4,000,000	$ 4,000,000
Total - Consumer Products	**$ 6,605,855**	**$ 18,405,304**	**$ 11,799,449**
Residential New Construction	$ 1,438,329	$ 2,015,379	$ 577,050
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 14,038,658	$ 27,269,631	$ 13,230,973
HES Income Eligible	$ 11,517,793	$ 24,077,002	$ 12,559,209
Subtotal Residential	**$ 33,600,635**	**$ 71,767,316**	**$ 38,166,681**
COMMERCIAL & INDUSTRIAL			
C&I LOST OPPORTUNITY			
Energy Conscious Blueprint	$ 10,889,221	$ 12,552,068	$ 1,662,847
Total - Lost Opportunity	**$ 10,889,221**	**$ 12,552,068**	**$ 1,662,847**
C&I LARGE RETROFIT			
Energy Opportunities	$ 16,198,999	$ 44,143,387	$ 27,944,388
O&M (Services, RetroCx, BSC)	$ 4,802,298	$ 13,357,044	$ 8,554,746
PRIME	$ 601,141	$ 938,935	$ 337,794
Total - C&I Large Retrofit	**$ 21,602,438**	**$ 58,439,366**	**$ 36,836,928**
Small Business	$ 13,867,636	$ 42,817,339	$ 28,949,703
Subtotal C&I	**$ 46,359,295**	**$ 113,808,773**	**$ 67,449,478**
OTHER - EDUCATION *			
SmartLiving Center® - Museum Partnerships	$ 881,746	$ 882,096	$ 350
EE Communities / Behavior Pilot	$ 1,300,000	$ 1,800,400	$ 500,400
K-8 Education	$ 726,825	$ 726,825	$ -
Residential Audits-Non WRAP	$ -	$ -	$ -
Community Based Program (SWCT)	$ -	$ -	$ -
Science Center	$ 208,000	$ 208,000	$ -
Subtotal Education	**$ 3,116,571**	**$ 3,617,321**	**$ 500,750**
OTHER - PROGRAMS/REQUIREMENTS			
Institute for Sustainable Energy (ECSU)	$ 560,000	$ 560,000	$ -
Other Funding Requests	$ -	$ -	$ -
Residential Loan Program (Includes ECLF)	$ 2,398,709	$ 2,397,980	$ (729)
C&I Loan Program	$ 550,000	$ 673,000	$ 123,000
C&LM Loan Defaults	$ 200,000	$ 350,000	$ 150,000
Subtotal Programs/Requirements	**$ 3,708,709**	**$ 3,980,980**	**$ 272,271**
OTHER - LOAD MANAGEMENT			
ISO Load Response Program	$ 4,876,000	$ 4,876,000	$ -
Water Heater Timer Promotion	$ -	$ -	
Demand Reduction	$ -	$ -	
Power Factor	$ -	$ -	
Subtotal Load Management	**$ 4,876,000**	**$ 4,876,000**	**$ -**
OTHER - RENEWABLES & RD&D			
Research, Development & Demonstration	$ 575,000	$ 600,900	$ 25,900
Subtotal Renewables & RD&D	**$ 575,000**	**$ 600,900**	**$ 25,900**
OTHER - ADMINISTRATIVE & PLANNING			
Administration	$ 1,650,000	$ 1,949,700	$ 299,700
Marketing Plan	$ 250,000	$ 750,000	$ 500,000
Planning (UI Planning & Evaluation)	$ 966,765	$ 1,096,315	$ 129,550
Evaluation (UI Evaluation , Outside Services)	$ 2,580,000	$ 2,780,400	$ 200,400
Information Technology	$ 2,042,500	$ 2,292,500	$ 250,000
Energy Efficiency Board	$ 850,000	$ 1,000,000	$ 150,000
Performance Management Fee	$ 4,986,273	$ 10,376,011	$ 5,389,738
Admin/Planning Expenditures	**$ 13,325,538**	**$ 20,244,926**	**$ 6,919,388**
PROGRAM SUBTOTALS			
TOTAL	**$ 105,561,748**	**$ 218,896,216**	**$ 113,334,468**

II. PURPOSE AND NEED

DEEP's approval of increased spending for energy efficiency up to an all cost-effective level is necessary to achieve the goals set forth in Section 1 of Public Act 11-80 for DEEP, as well as the policies identified in the 2012 IRP developed by DEEP to mitigate an increase in electricity rates expected to occur after 2017. Furthermore, the approval of increased spending for energy efficiency is supported by the statutory directive, set forth in Section 16a-3a of the General Statutes of Connecticut, that "resource needs shall first be met through all available energy efficiency and demand resources that are cost-effective, reliable and feasible."[17] Moreover, approval of expanded investment in energy efficiency is necessary for compliance with various statutory mandates established by Public Act 11-80, including the requirement in Section 33(d)(1) to weatherize 80% of Connecticut homes by 2030, and the requirement in Section 118(b) to reduce energy use in state-owned or leased buildings by 10% by January 1, 2013 and another 10% by January 1, 2018. Additional conservation will also reduce the need for some distribution and transmission capacity.

A. DEEP Goals and the 2012 Integrated Resources Plan

Public Act 11-80, in creating the new Department of Energy and Environmental Protection, identified four overarching departmental goals for the purposes of energy policy and regulation, one of which is "reducing rates and decreasing costs for Connecticut's ratepayers."[18] These goals guide DEEP's exercise of its authorities and responsibilities, including the development of the Integrated Resources Plan (IRP). Under Public Act 11-80, DEEP is charged with developing an IRP on a biennial basis, to review the state's energy and capacity resource assessment and to develop a plan for the procurement of energy resources that addresses, among other things, the manner of how best to eliminate growth in electric demand and maximize the impact of demand-side measures.[19] DEEP issued a draft of the 2012 IRP on January 20, 2012.[20]

The draft 2012 IRP specifically identified the need to expand energy efficiency programs as part of a broader strategy to mitigate an increase in electricity rates expected to occur after 2017. The draft IRP recommends that Connecticut capture all cost effective efficiency, which is cheaper than supply, as the most beneficial way to meet resource needs in a way that reduces costs for consumers. The draft IRP concluded that by increasing the C&LM program budget from $105 million annually to $206 million annually, Connecticut can cost-effectively achieve an annual savings of approximately 2.1% of electric consumption, resulting in a 0.4% decline in

[17] The DPUC has historically interpreted the statutory "all cost-effective" requirement to allow additional energy efficiency investments only in the circumstance where a capacity or energy need was forecasted—a circumstance that was not identified in any past Integrated Resource Plans. Therefore, the DPUC did not approve any additional investment in energy efficiency under the all cost-effective mandate in Docket Nos. 08-07-01 or 10-02-07. A revisitation of Section 16a-3a's mandate may be warranted.
[18] Section 1 of Public Act 11-80.
[19] *See* §§16a-3a(b) & (d).
[20] The IRP is currently in draft form, and will be finalized before DEEP issues final approval of the 2012 C&LM Expanded Budget.

the annual growth rate for energy consumption.[21] This level of expansion is consistent with the Expanded Budget submitted by the EEB.

Even after paying for all energy efficiency program costs, the draft IRP finds that a sustained commitment to funding energy efficiency at this level would save electric ratepayers an estimated $534 million per year by 2022, as compared to a business-as-usual base case that assumes continuation of the current level of efficiency investment. These expanded savings would arise by lowering peak demand, reducing the consumption of electricity, and by reducing the number of required renewable credits.

Energy savings are projected to increase from 235 GWh in the base case modeled in the IRP, to 366 GWh in the all cost-effective model, an increase of 156%. Demand savings increase from 30 MW in the base case to 125 MW in the all cost-effective model. This is an increase of 316% for essentially a 100% increase in the budget. A dramatic reduction in the unit cost (i.e., cost per kWh and kW) to deliver these savings would be necessary to meet these objectives. The cost per kWh declines from 4.5 cents/kWh in the base case to 3.2 cents/kWh for incremental savings in the IRP. The cost per kW drops by approximately 70% from $3,486/kW to $1,052/kW.[22]

In addition, the draft IRP identifies that savings would accrue from reductions in market prices for energy and capacity due to reduced demand that would eliminate the call for the highest cost resources. As such, the approval of the Expanded Budget is consistent with the statutory goals of DEEP to reduce rates and to decrease costs for ratepayers, and is essential to implement the policy identified in the draft 2012 IRP.

Although there is no imminent need for new generation capacity identified in the draft 2012 IRP, expanding current conservation efforts will push the need for generation out even further and provide a hedge if reliability is threatened due to unanticipated plant retirements or other unexpected events. The draft IRP also identifies positive environmental impacts and economic development potential that should result from expanded conservation. The draft IRP estimates that air emissions would decline between 5% and 10% and support an additional 5,500 in-state jobs by 2022.[23]

B. Lead by Example

Sections 118, 119, 122 and 123 of Public Act 11-80 require DEEP, jointly with the Department of Administrative Services, to implement a plan to reduce energy consumption by 10% at state owned or leased buildings by January 1, 2013, and an additional 10% by January 1, 2018. The plan calls for other initiatives to maximize energy efficiency in state buildings, such as benchmarking, energy audits, technical assistance to state agencies, financing of energy efficiency projects through energy saving performance contracting, and establishing reporting requirements. To effect these changes, the state has issued $15 million in bonds to provide the

[21] This recommendation is supported by analysis in the 2010 Connecticut Electric Residential Commercial and Industrial Energy Efficiency Potential Study commissioned by the Energy Efficiency Board.
[22] Draft 2012 IRP p. 32.
[23] Draft 2012 IRP p iii.

long-term financing for energy efficiency projects in state facilities. These bonds will provide approximately 50% of the incentives for state buildings that would otherwise qualify for ratepayer funds under the C&I programs funded through the C&LM Program, enabling ratepayer dollars to be allocated toward other C&I programs thereby reducing the programs' overall unit cost for the C&LM dollars.[24]

Approval of the Expanded Budget is critical to ensure that the statutory mandate to reduce energy consumption in state buildings is met. Under the Expanded Budget, state buildings will have access to $2.1 million in C&LM funding through the Small Business Energy Advantage program. This money is projected to deliver 21 GWh of savings to the state, which will contribute significantly to the state's ability to reach the goal of 10% savings by January 1, 2013.

C. Weatherization Goal for Residential Buildings

Section 33(d)(1) of Public Act 11-80 states that C&LM plans developed by the EDCs "shall include steps that would be needed to achieve the goal of weatherization of eighty percent of the state's residential units by 2030." An increase in the number of residential customers served under HES and HES-IE is necessary to increase savings and to meet the weatherization goal. As a result, additional funding, secured through the Expanded Budget is needed to achieve this goal.

III. COST-EFFECTIVENESS DETERMINATION

By law, programs included in the C&LM Plan—including those that would be supported by the Expanded Budget—must be screened through cost-effectiveness testing that compares the value and payback period of program benefits to program costs to ensure that the programs are designed to obtain energy savings and system benefits, including mitigation of federally mandated congestion charges, whose value is greater than the costs of the programs.[25] The Department has, in accordance with statutory requirements, screened the programs to be supported by the Expanded Budget, and finds them to be cost-effective for the reasons described below.

The EDCs have submitted detailed programmatic cost and savings information for the Expanded Plan in Table B of the 2012 Electric and Gas Conservation and Load Management Plan. The methodologies used to evaluate the cost effectiveness of the C&LM programs are described in detail in Chapter 6 of the 2012 C&LM Plan. For the 2012 Plan, the EDCs have used benefit-cost screening tools that are consistent with those used in the past. Table B includes a benefit-cost analysis of each program using both the Electric System Test and Total Resource Test. The Electric System Test evaluates the programs based on the costs to electric ratepayers and the savings to the electric system. The Total Resource Test includes the cost to the participant and other non-electric savings. The Electric System Test has been the primary test used by the former DPUC to evaluate the cost effectiveness of all electric conservation programs

[24] State projects that qualify under the C&I programs must still meet the cost-effectiveness criteria established in the C&I programs administered by the C&LM funds.
[25] Conn. Gen. Stat. §16-245m (d)(1).

except low income programs. The former DPUC has allowed low income programs as long as they pass the Total Resource Test.

The information provided in Table B indicates that overall, the Expanded Plan is cost effective from an electric ratepayer perspective. All of the programs, except CL&P's Home Energy Solutions (HES) program and the HES Income Eligible (HES-IE) program are cost effective using the Electric System Test. The HES-IE and HES for CL&P programs are not cost-effective under the Electric System Test because they include incentives for oil savings measures that are paid for by electric ratepayers. All of the programs, including HES-IE and HES for CL&P, are cost effective using the Total Resource Test. The benefits of the oil savings in HES-IE and HES are included in the Total Resource Test, with the result that those programs have a positive benefit cost ratio.

Having reviewed the programmatic cost and savings information DEEP concludes that overall the Expanded Plan, including HES and HES-IE, is cost-effective. This determination is consistent with decisions of the former DPUC, which has allowed oil subsidies for low income customers and approved low income programs that pass the Total Resource Test. The former DPUC has allowed oil subsidies to a limited extent, in the HES program, but still required this program to be cost effective under the Electric System Test.[26] The benefit to cost ratio for CL&P's proposed expanded HES program is 0.9 when all the costs and just the electric system benefits are considered.[27] Since this is the primary program for residential customers and it is very close to being cost effective, DEEP's approval of the Expanded Budget is conditioned on the EDCs implementing the additional measures discussed in the Program Review and Modification section, below.

As identified in the draft 2012 IRP, unit costs for all C&LM programs must decline to ensure that increased savings are achieved while minimizing any rate increases. DEEP is pleased to see that the Expanded Plan includes more financing and performance contracting to lower costs. The cost of financing for C&I customers must be reduced and other cost-cutting measures aggressively pursued. As discussed below, the Department has modified the Expanded Plan to increase the amounts available for self-funding of residential loans, and implementation of self-funding for C&I financing, so that ratepayer subsidies can be reduced and unit costs decline. These efforts must be expanded in the years to come to reach the aggressive savings and unit cost goals outlined in the draft 2012 IRP.

DEEP's approval of the Expanded Budget for this program for 2012 is conditioned on the EDCs, in coordination with the EEB, implementing additional measures to bring down the overall cost of C&LM programs in the long term. As programs ramp up, the EDCs must provide to DEEP quarterly reporting on customer participation, program activity, and cost-effectiveness. The EDCs are in the process of establishing a dashboard for reporting company-wide C&LM program activity and spending. This dashboard will facilitate quarterly reporting. In addition, DEEP will require the EDCs to implement the measures discussed in Section V, below, to improve the effectiveness of the HES programs.

[26] *See*, Decision dated, March 17, 2010, in Docket No. 09-10-03, DPUC Review of The Connecticut Energy Efficiency Fund's 2010 Conservation and Load Management Plan for 2010.
[27] 2012 C&LM Plan, pp. 352.

IV. EQUITABLE DISTRIBUTION OF FUNDS

Section 101 of Public Act 11-80 requires DEEP, before approving the C&LM Plan submitted by the EEB, to determine "that an equitable amount of the funds . . . are to be deployed among small and large customers . . . in census tracts in which the median income is not more than sixty per cent of the state median income."

The C&LM Plan submitted by the EEB includes a Budget and Parity Analysis which shows that program budgets for each customer sector in the Expanded Plan closely match the revenues collected from the respective customer sector.[28] DEEP has reviewed this information and is satisfied that the EEB has taken sufficient care to ensure equity between customer classes and has provided a reasonable analysis to demonstrate that equitable distribution of program participation has been achieved.

DEEP is nearing completion of a report on the Equitable Distribution of Funds, as required under Section 101 of the Act. The report will provide additional analysis of the distribution of C&LM program funds across customer sectors. As this report will indicate, to comply with Section 101 going forward the EDCs must begin tracking program expenditures by census tract, and must utilize marketing and other measures to boost program participation in distressed communities. The implementation of these measures is especially critical as the programs ramp up.

V. PROGRAM REVIEW AND MODIFICATION

A. Home Energy Solutions

Since 2007, the Home Energy Solutions (HES) program has delivered services to approximately 100,000 Connecticut homes. The Expanded Plan supports a dramatic expansion in the number of homes that can be serviced by the HES program. Under the Base Plan, the EDCs will deliver HES services to approximately 38,000 homes, while under the Expanded Budget the EDCs would increase the number of homes served to a total of 72,000 homes.[29] This significant increase in the number of residential customers served under HES and HES-IE is critical to increase savings and to meet the weatherization goals established under Public Act 11-80.

Several key improvements must be made to the HES and HES-IE programs to ensure that the quality and effectiveness of the programs keeps pace with the increased volume of homes serviced.[30] The EEB, in its oversight capacity, must ensure a more gradual ramp up of program activity to allow for the completion of these improvements to assure the program is ready to

[28] *See* C&LM Plan, pp. 348 & 351.
[29] The 2012 data reflect the combined goals for UI and CL&P for HES and HES-IE. The figure for the number of homes to be served under the Expanded Budget assumes full funding of the Expanded Plan effective January 1, 2012.
[30] The Department is not suggesting that the EDCs suspend the HES program while these improvements are being addressed.

deliver comprehensive services as cost-effectively as possible. The required improvements are as follows:

1. Weatherization. As discussed above, section 33(d)(1) of Public Act 11-80 established a new requirement that each C&LM Plan must include steps that would be needed to achieve the goal of weatherizing 80% of the state's residential units by 2030. The EEB is promulgating a definition of "weatherization" for the purpose of meeting the goals of Public Act 11-80. This definition is still forthcoming, and therefore it is unclear whether the homes that have been served under HES, or homes that are currently being served, meet this yet-to-be-defined standard. Moving forward rapidly will result in a lost opportunity if customers participate in the HES program but do not make the necessary improvements to qualify as a weatherized home under the forthcoming standard. Therefore, before any funds from the Expanded Budget are expended for HES programs, the EEB must finalize its definition of weatherization to ensure that the HES program is executed so as to maximize achievement of the weatherization goal.

2. Deploy Audit Tool. Customers must be presented with better information as to the benefits and cost of recommended measures. An improved customer experience during the audit is essential, as customer education is the key to securing commitments to the installation of deeper measures that will have significant efficiency benefits. Customers should not be overwhelmed with brochures, rebates, product literature, etc. Instead, customers should be provided a tailored document that provides critical data in a concise, easy to understand format that can act as a roadmap to improved energy efficiency over time. As soon as possible, the EEB must develop and deploy the tools necessary to deliver clear, customer-specific information about programs, rebates, financing, and other opportunities the customer is eligible for, that will enable the customers to achieve the energy savings identified through the audit.

3. Data Gathering. The HES program provides an invaluable opportunity to gather critical information from customers that can be used for current and future studies of the uptake of efficiency measures (e.g., appliance saturation). This information can also be used to motivate future behavior (e.g., reduced peak energy use) or stimulate energy related investments. Ultimately, this information should be used to better evaluate cost effectiveness and achieve Connecticut's energy goals. Therefore, in developing and deploying the tools referenced above, the EDCs and EEB must develop a protocol for gathering critical information through those tools from HES participants.

4. Uptake for deeper savings among broader customer base. HES vendors and the EDCs have struggled to convince residential customers to invest in additional measures beyond HES Core Services. The EDCs have recently begun working with Gateway Community College to develop sales training for HES vendors to improve customer uptake of broader and deeper savings. The EDCs must ensure that at least 50% of HES vendors receive sales training by 2013.

In addition to these requirements, the EDCs and vendors must conduct a targeted follow-up effort to previous HES participants to encourage deeper savings. The delivery of Core Services represents the most costly component of the HES program. This cost must provide value to all of the ratepayers who support this initiative.

B. Self-Funding Residential Loans

The EDCs conducted a one-year residential Financing Pilot between June 2010 and May 2011. Through that program, the EDCs provided a total loan volume of about $14 million. The Financing Pilot demonstrated the potential for residential loan volume going forward. Several steps have been taken recently to increase the amount of available capital for the self-funding of residential energy efficiency loans. As shown in Table 3, below, in the approval of the Base Budget, the Department allocated $12.6 million for CL&P customers and $600,000 for UI to this effort.

Table 3

Balance - Self-Funding Residential Loans		
Item	CL&P	UI
2010 Carry Over	$6,000,000	-
2012 Base Plan	$2,000,000	-
2011 Carry Over	$4,000,000	$600,000
TOTAL	**$12,000,000**	**$600,000**

Lowering the cost of providing energy efficiency to residential customers will require a significant increase in the number customers willing to install deeper efficiency measures without requiring rebates to do so. A comprehensive marketing effort is being planned to stimulate interest in energy efficiency and to drive increased C&LM program participation across Connecticut. DEEP expects that program activity and loan volume will increase as marketing efforts are expanded. Consumers will need access to low-cost capital to finance the measures necessary to provide increased savings. Therefore, adequate capital must be available to support the expected demand for residential financing.

Based on the foregoing, the Department finds that the self-funding balance of $12.6 million approved in the Base Budget is inadequate to support the level of residential financing that will be necessary to meet long-term savings goals under the Expanded Plan through the self-funded revolving loan program, and is not proportionally allocated between the EDCs. Therefore, the balance must be increased, by allocating a greater, proportionate share of each EDC's annual residential C&LM budget to residential self-funding. Historically, revenues, costs, and activities related to C&LM Plans have been divided between CL&P and UI based on the ratio of sales among the two EDCs, according to a ratio of about 80:20. Applying that ratio, under the Expanded Plan, UI's total share of funding for self-funding of residential loans should be about $3 million, rather than the current balance of $600,000 (see Table 3). DEEP has therefore determined to modify the proposed Expanded Budget to allocate $3 million from CL&P's 2012 residential Expanded Budget proposal to self-funding of residential loans, and $1.5 million from UI's 2012 residential Expanded Budget to self-funding of residential loans. The addition of $4.5 million would increase the available self-funding balance in the overall 2012 C&LM budget to $17.1 million.

Because it is not possible to accurately predict future loan volume, the EDCs and the EEB should allocate additional funds to this initiative from future annual C&LM budgets and monitor the program to assure that funding reflects consumer demand.[31] Beginning in 2013 and annually thereafter, DEEP recommends that CL&P allocate 10.5% of its overall residential budget and that UI allocate 12.5% of its residential budget to this program.[32] If consumer interest in the residential loan program does not meet expectations, the funds allocated to residential financing can be reallocated to support program activity.

C. Commercial & Industrial Programs

Several program and funding issues, discussed below, will affect the ability of the programs to increase in scale and comprehensiveness of the commercial and industrial (C&I) programs in the Expanded Plan. In general, DEEP finds that the Expanded Plan will achieve deeper energy savings among a broader range of C&I participants. Programs would be transformed from the installation of discrete efficiency measures to high performance building and facility upgrades. Programs would also be broadened to reach under-served market segments, particularly small businesses, and to promote and accelerate market transformation. The Expanded Plan proposes increasing the total budget for Commercial and Industrial (C&I) efficiency programs by 145% (as compared to the Base Budget) from $46.4 million to $113.8 million. This increase would produce an even greater increase in total energy savings, from 20.9 MW to 54 MW, or 158% (compared to the Base Budget).[33] The Expanded Plan would achieve these savings not only through funds recovered from ratepayers, but also through performance contracting, leveraging of private capital, and state bond funding to finance state building projects.

More specifically, the Expanded Plan proposes to significantly increase retrofit efforts for large and small businesses by expanding Energy Opportunities (EO) and Small Business Energy Advantage (SBEA) programs. In addition, large increases to the O&M budget would be used to fund the Business and Energy Sustainability Challenge program, which aims to transform business management practices through training efforts on operation and maintenance (O&M) and energy management practices to maximize efficiency. Given limited amounts of new construction in the state, the Energy Conscious Blueprint program would have a comparatively modest budget increase. The particular budget allocations proposed by the EDCs and EEB for these programs are detailed in Table 4, below.

[31] The level of funding must be revisited annually as program activity changes and as we gain experience with the residential financing market.
[32] The disparate allocation percentages are intended to address the funding imbalance.
[33] 2012 C&LM Plan, Tables A1 and B2, pp 20, 23, 346 & 348.

Table 4

C&I Program Budget Increases			
C&I Program	**2012 EDC Base Budget**	**2012 EDC Expanded Budget**	**Percent Change**
Energy Conscious Blueprint	$10,889,221	$12,552,068	15.3%
Energy Opportunities	$16,198,999	$44,143,387	172.5%
O&M*	$4,802,298	$13,357,044	178.1%
PRIME	$601,141	$938,935	56.2%
Sm. Bus. Energy Adv.	$13,867,636	$42,817,339	208.8%
TOTAL C&I	**$46,359,295**	**$113,808,773**	**145.5%**

* O&M Services, RetroCommissioning, Business Sustainability Challenge
Source of data: 2012 Plan, Tables A1 and B2; pp. 20, 23, 346, and 348.

In their comments on the Expanded Plan, the EDCs acknowledged they will need additional vendors and infrastructure to fully implement the expanded C&I programs. At the Technical Meeting, the EDCs stated that they are making arrangements in preparation for the program ramp-up. The EDCs indicated that they currently have qualified EO and SBEA vendors on a waiting list. If increased funding receives final approval, the EDCs will hire additional vendors. The SBEA vendors will also be required to install simple gas efficiency improvements such as pipe insulation and low flow faucets. UI indicated that, through the use of American Recovery and Reinvestment Act (ARRA) funds, it has established a partnership with Gateway Community College to develop a training program for certified energy auditors.

DEEP notes that, with the exception of the Business Sustainability Challenge pilot program, the C&I programs are mature initiatives that have been in operation for over a decade. The ramp-up of these programs therefore will not require a commensurate increase in EDC staff to manage these programs. DEEP expects these mature C&I programs to demonstrate economies of scale and exert downward pressure on unit costs. The EEB should monitor EDC staffing levels to ensure that scale economies are maximized.

To meet the saving targets in the Expanded Plan, the C&I programs will rely on external financing to supplement ratepayer-funded incentives to businesses. This will leverage the C&LM dollars to support more C&I projects and maintain program cost-effectiveness. The C&LM fund already supports financing opportunities for C&I customers through interest rate buy downs. Additional sources of financing include private capital, described below, and state bonding through the Lead by Example program.

The Small Business Energy Advantage program provides incentives and interest-free financing for efficiency projects that include gas measures, with no upfront cost to small business customers. The program provides on-bill loan repayment, which appears as a line item on the customer's bill. The EDCs provide the capital to finance the loans, and the C&LM fund pays the EDCs at their respective costs of capital plus some administrative costs.

The C&I programs have already acquired three sources of external C&I financing. As a result of a recent competitive bid, Univest and M-Cor will supply private financing for C&I customers. Using these sources of capital, the C&LM fund will provide $550,000 of program funding to support interest buy downs. A third source of external funds is the Connecticut Hospital Association Trust which was funded as a result of Public Act 05-01. Approximately $1 million remains from this revolving fund to finance interest buy downs for eligible health care facilities.

Performance contracting is another source of financing. The performance incentive matrix in the Expanded Plan requires that 10% of projects in the Energy Opportunities (EO) Program incorporate performance contracts or external financing. DEEP clarifies that this 10% figure excludes all contracts for state buildings in the Lead by Example program. DEEP notes that the 10% requirement is the same as in the Base Plan. Since the EO budget is much larger in the Expanded Plan, the number of performance contracts will rise substantially.

1. Operations and Maintenance Programs

The 2012 Expanded Budget has allocated a major increase for O&M programs (also referred to as the Business and Energy Sustainability program in the Base Plan), which comprises the following components: Retro-commissioning, Business Sustainability Challenge, O&M Services, and Training and Outreach. As shown in Table 4, program expenditures are budgeted to increase from $4,802,298 in the Base Budget to $13,357,044 in the Expanded Budget. The O&M budget increase of 178% is the second highest percentage increase among the C&I programs.

The objective of the O&M programs, especially the Business Sustainability Challenge program, is to educate and train businesses to operate their equipment and manage their businesses in a way that improves energy efficiency. The program also provides businesses with the tools and training to measure their energy use. The focus on operational and cultural changes in businesses presents new challenges in measuring program savings and cost-effectiveness. Currently, C&I programs that install efficient equipment, such as lighting and HVAC systems, use the "deemed savings" approach to measure energy savings. This approach measures average savings typical for an installed energy efficiency measure that has been developed from generally accepted data sources and applicable to the installed measure.[34] Programs that rely on a behavioral approach to savings would be required to measure savings from operational and managerial actions taken.

At the Technical Meeting, Mr. Jeffrey Schlegel, consultant for EEB, indicated that the Business Sustainability Challenge is still transitioning out of the pilot phase and is currently undergoing a process evaluation and tracking of energy savings. However, evaluators have not yet measured the energy savings impact of the program. Protocols for measuring behavioral changes by businesses should be developed and adopted by the EEB's Evaluation Committee during 2012 for implementation in the 2013 C&LM Plan. Given the work needed to develop measurement and verification (M&V) protocols, DEEP believe it is premature to nearly triple the budget for the O&M programs. Therefore, DEEP has modified the Expanded Budget to allocate $5 million from O&M programs to be used for self-financing of C&I loans, as discussed below.

[34] Glossary of Terms, Version 2.1, A Project of the Regional Evaluation, Measurement and Verification Forum, July 2011, Prepared by Paul Horowitz PAH Associates, Facilitated by Northeast Energy Efficiency Partnerships.

Public Act 11-80 authorizes CEFIA to develop a low-cost source of bond funding for the purposes of financing energy efficiency projects. While CEFIA financing options are under development, DEEP is working with the EEB to develop additional sources of external financing to leverage ratepayer dollars from the C&LM fund. In 2012, these financing options will be under development and C&I programs will be ramping up to meet the savings goals of the Expanded Plan. During this interim time period, DEEP directs the EEB and EDCs to utilize self-funding for the EO program, i.e. setting aside a portion of C&LM funds as the source of capital to fund loans for large C&I projects. While DEEP recognizes that self-funding dollars must be deducted from the EO program budget, the additional ratepayer dollars available during the 2012 ramp-up period affords a favorable opportunity to support self-funding. The EEB must ensure that C&LM funds used for the purposes of financing C&I projects are subject to lending terms consistent with other financing vehicles for C&I customers, including interest rates, financial qualifications of borrower, and payback lengths. The EEB should also review existing programs and potential enhancements for large customers' energy investments and determine whether self-directed programs would better serve this customer class.

2. C&I Incentive Caps

In the Addendum to the Base Plan Approval, dated February 22, 2012, DEEP recommended that PURA raise the C&I customer cap from $750,000 to $800,000 per federal tax identification number (Tax I.D.) and eliminate the per metered site cap of $300,000. Similarly, in approving the Expanded Budget, DEEP finds that the annual cap should be raised from $800,000 to $1.5 million, and continue to eliminate a per metered site cap. An annual cap of $1.5 million per Tax I.D. is appropriate, will allow flexibility for larger multi-year projects, and will assure that the greatest number of C&I customers are serviced under the C&LM programs. Going forward, DEEP recommends an annual incentive cap, which would not impose restrictions for large C&I customers to receive incentives in future years. The EEB should evaluate the appropriateness of the $1.5 million cap after the first year of the Expanded Plan.

D. Consultant Costs and Education Programs

The proposed budget for consultants (line item identified as Energy Efficiency Board) submitted by the EDCs would increase from $850,000 under the Base Plan to $1 million under the Expanded Plan. The following table provides historical costs for this line item:

Table 5

Consultant Budget	
Year	Amount
2008	$ 460,000
2009	$ 590,000
2010	$ 610,000
2011	$ 610,000
2012	$ 1,000,000
Source of data: 2008-2012 C&LM Plans Table A1	

As the table shows, the proposed budget would nearly double spending on consultants as compared with spending over the last three years. In addition, there are consultant costs embedded in the budget for program evaluation. In 2000, the Energy Efficiency Board relied on a single consultant to guide the development of Connecticut's C&LM programs. Since that time the number of consultants has increased and their role has expanded to include administrative tasks, such as providing subcommittee reports at monthly Energy Efficiency Board meetings. It is unclear whether this is the best use of these resources. It is not clear that expanding the budgets for existing programs would necessitate a proportionate increase in consultant staffing. Instead, economies of scale should be achieved.

For these reasons, DEEP has modified the Expanded Budget to reduce the allocation for consultant costs to $610,000 for the Energy Efficiency Board for 2012 and reallocate these dollars to educational efforts. Educating consumers about the benefits of energy efficiency will be critical to the success of the Expanded Plan. While program marketing will drive initial participation, absent an increased focus on educating consumers to the benefits of investing in efficiency it will remain difficult to incent residential and business customers to pursue deeper savings. The Expanded Plan submitted by the EDCs proposed to increase residential and business program spending in excess of 100% (by $38 million and $67 million respectively) spending for general education was proposed to increase by only $500,000, or about 16%. An allocation of consultant funds to educational programs will help to ensure that education programs are able to ramp up in step with the programs they support.

Regarding program evaluation costs embedded in individual programs, DEEP expects that consultant costs should increase by no more than 10% from 2011 levels to achieve economies of scale. The EEB should examine this matter in more detail during 2012.

VI. FEASIBILITY OF PROGRAM PERFORMANCE AT EXPANDED LEVELS

As part of its screening of the C&LM programs for cost-effectiveness, the Department has requested information from the EDCs about the feasibility of expanding existing C&LM programs, including maintaining the quality and cost-effectiveness of those programs at expanded levels of activity. Spending at the level proposed in the Expanded Budget would, in most cases, cause program activity to double over a period of several months.

Programs must maintain quality and cost-effectiveness during the ramp up to expanded activity levels. The Department therefore supports a controlled ramp up to all cost-effective spending levels, to ensure that program quality is maintained or improved and that funding results in reasonable rates and bills. This is especially true given that all proceedings on the Expanded Budget may not be completed until well into 2012. Recall that, as noted above, the Expanded Budget submitted by the EEB sought approval of a ramp up to an investment level of $218.9 million. Of that $218.9 million, $17 million is proposed to be derived from oil funding and $105.6 million would be funded through the Base Plan, leaving an additional $96.3 million to be collected for the Expanded Budget. This figure assumes a full year of program activity, beginning January 1, 2012. Since all proceedings on the Expanded Budget may not be completed until the second half of 2012, program spending would not be expected to reach the proposed levels in 2012.

On May 25, 2012, DEEP therefore requested from the EDCs supplemental information about the projected levels of spending the EDCs could expect to maintain for 2012 under an Expanded Budget scenario, while maintaining the same or better program quality and effectiveness. This information is provided in Appendix A, and summarized in Table 6. Based on this information, DEEP concludes that the EDCs can ramp up to a total spending level of approximately $158.4 million in 2012 while maintaining program and vendor quality. At this level, $34.2 million, rather than $96.3 million, would be needed to fund program activity under the Expanded Budget for 2012. Funding at this level in 2012 would enable the EDCs to ramp up program activity in a gradual, more controlled way for the remainder of 2012, while positioning the EDCs to deliver conservation programs at the expanded, all cost-effective level in 2013.

DEEP's approval of the 2012 Expanded Budget (Column D in Table 6) reflects the projected amounts the utilities have indicated that they can feasibly spend in the second half of 2012, including a reduction to the Load Management budget identified by UI in its response to DEEP's May 25, 2012 data request. The approved budget amounts in Column D also includes adjustments to program budgets made by DEEP in this determination, as discussed in the previous section. The Energy Efficiency Board line item includes the reduction in consultant costs made by DEEP, and the EE Communities/Behavior Pilot line item includes the corresponding increase to education program funding made by DEEP. DEEP's modifications with respect to self-funding for residential and C&I did not alter the total budget for either program line item.

Table 6

DEEP Approved 2012 Total Budget					
Energy Efficiency Programs	(a) **DEEP Approved 2012 Base Budget**	(b) **EDC Proposed 2012 Expanded Budget**	(c) = (a + b) **EDC Proposed 2012 Total Budget**	(d) **DEEP Approved 2012 Expanded Budget**	(e) = (a + d) **DEEP Approved 2012 Total Budget**
RESIDENTIAL					
Residential Retail Products	$ 6,605,855	$ 7,799,449	$ 14,405,304	$ 4,424,725	$ 11,030,580
Appliance Rebate Program	$ -	$ 4,000,000	$ 4,000,000	$ 3,100,000	$ 3,100,000
Total - Consumer Products	**$ 6,605,855**	**$ 11,799,449**	**$ 18,405,304**	**$ 7,524,725**	**$ 14,130,580**
Residential New Construction	$ 1,438,329	$ 577,050	$ 2,015,379	$ 139,000	$ 1,577,329
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 14,038,658	$ 13,230,973	$ 27,269,631	$ 5,623,789	$ 19,662,447
HES Income Eligible	$ 11,517,793	$ 12,559,209	$ 24,077,002	$ 7,494,300	$ 19,012,093
Subtotal Residential	**$ 33,600,635**	**$ 38,166,681**	**$ 71,767,316**	**$ 20,781,814**	**$ 54,382,449**
COMMERCIAL & INDUSTRIAL					
C&I LOST OPPORTUNITY					
Energy Conscious Blueprint	$ 10,889,221	$ 1,662,847	$ 12,552,068	$ 882,015	$ 11,771,236
Total - Lost Opportunity	**$ 10,889,221**	**$ 1,662,847**	**$ 12,552,068**	**$ 882,015**	**$ 11,771,236**
C&I LARGE RETROFIT					
Energy Opportunities	$ 16,198,999	$ 27,944,388	$ 44,143,387	$ 13,422,436	$ 29,621,435
O&M (Services, RetroCx, BSC)	$ 4,802,298	$ 8,554,746	$ 13,357,044	$ 1,686,277	$ 6,488,575
PRIME	$ 601,141	$ 337,794	$ 938,935	$ 138,543	$ 739,684
Total - C&I Large Retrofit	**$ 21,602,438**	**$ 36,836,928**	**$ 58,439,366**	**$ 15,247,256**	**$ 36,849,694**
Small Business	$ 13,867,636	$ 28,949,703	$ 42,817,339	$ 9,110,000	$ 22,977,636
Subtotal C&I	**$ 46,359,295**	**$ 67,449,478**	**$ 113,808,773**	**$ 25,239,271**	**$ 71,598,566**
OTHER - EDUCATION *					
SmartLiving Center® - Museum Partnerships	$ 881,746	$ 350	$ 882,096	$ 350	$ 882,096
EE Communities / Behavior Pilot	$ 1,300,000	$ 500,400	$ 1,800,400	**$ 620,000**	$ 1,920,000
K-8 Education	$ 726,825	$ -	$ 726,825	$ -	$ 726,825
Residential Audits-Non WRAP	$ -	$ -	$ -	$ -	$ -
Community Based Program (SWCT)	$ -	$ -	$ -	$ -	$ -
Science Center	$ 208,000	$ -	$ 208,000	$ -	$ 208,000
Subtotal Education	**$ 3,116,571**	**$ 500,750**	**$ 3,617,321**	**$ 380,350**	**$ 3,496,921**
OTHER - PROGRAMS/REQUIREMENTS					
Institute for Sustainable Energy (ECSU)	$ 560,000	$ -	$ 560,000	$ -	$ 560,000
Other Funding Requests	$ -		$ -	$ -	$ -
Residential Loan Program (Includes ECLF)	$ 2,398,709	$ (729)	$ 2,397,980	$ 3,998,571	$ 6,397,280
C&I Loan Program	$ 550,000	$ 123,000	$ 673,000	$ 85,000	$ 635,000
C&LM Loan Defaults	$ 200,000	$ 150,000	$ 350,000	$ 25,000	$ 225,000
Subtotal Programs/Requirements	**$ 3,708,709**	**$ 272,271**	**$ 3,980,980**	**$ 4,108,571**	**$ 7,817,280**
OTHER - LOAD MANAGEMENT				$ -	
ISO Load Response Program	$ 4,876,000	$ -	$ 4,876,000	$ (1,376,000)	$ 3,500,000
Water Heater Timer Promotion	$ -		$ -	$ -	$ -
Demand Reduction	$ -		$ -	$ -	$ -
Power Factor	$ -		$ -	$ -	$ -
Subtotal Load Management	**$ 4,876,000**	**$ -**	**$ 4,876,000**	**$ (1,376,000)**	**$ 3,500,000**
OTHER - RENEWABLES & RD&D					
Research, Development & Demonstration	$ 575,000	$ (1,175,900)	$ 600,900	$ -	$ 575,000
Subtotal Renewables & RD&D	**$ 575,000**	**$ 25,900**	**$ 600,900**	**$ -**	**$ 575,000**
OTHER - ADMINISTRATIVE & PLANNING					
Administration	$ 1,650,000	$ 299,700	$ 1,949,700	$ 250,000	$ 1,900,000
Marketing Plan	$ 250,000	$ 500,000	$ 750,000	$ 500,000	$ 750,000
Planning (UI Planning & Evaluation)	$ 966,765	$ 129,550	$ 1,096,315	$ 51,190	$ 1,017,955
Evaluation (UI Evaluation , Outside Services)	$ 2,580,000	$ 200,400	$ 2,780,400	$ -	$ 2,580,000
Information Technology	$ 2,042,500	$ 250,000	$ 2,292,500	$ 50,000	$ 2,092,500
Energy Efficiency Board	$ 850,000	$ 150,000	$ 1,000,000	**$ (240,000)**	$ 610,000
Performance Management Fee	$ 4,986,273	$ 5,389,738	$ 10,376,011	$ 2,735,243	$ 7,721,516
Admin/Planning Expenditures	**$ 13,325,538**	**$ 6,919,388**	**$ 20,244,926**	**$ 3,686,433**	**$ 17,011,971**
TOTAL	**$ 105,561,748**	**$ 113,334,468**	**$ 218,896,216**	**$ 52,820,439**	**$ 158,382,187**

VII. REVENUE RECOVERY MECHANISMS FOR THE EXPANDED BUDGET

DEEP considered several funding mechanisms that could be used to recover the revenues necessary to support the Expanded Plan. Because the Expanded Plan calls for funding energy conservation programs at a level exceeding the amount of funding available in the Energy Conservation and Load Management Fund, any additional collection of funds from ratepayers would be subject to authorization by PURA, in accordance with PURA's statutory authorities and procedures. DEEP provides the following recommendations about the appropriate revenue recovery mechanisms for PURA's consideration in such a proceeding.

DEEP considered three potential funding mechanisms for the Expanded Budget, including a direct increase in the current $0.003/kWh assessment; an authorization to allow the EDCs to include energy efficiency in their rate base; and the implementation of a Conservation Adjustment Mechanism (CAM). Each of these mechanisms requires funding by electric ratepayers. DEEP concluded that the implementation of a CAM is the best way to fund increased conservation spending. A direct increase to the existing $0.003/kWh assessment would require legislative action. Given the immediate need to increase revenue to recover the funds necessary for conservation spending, a direct increase through legislative action is not a feasible mechanism for funding the 2012 Expanded Budget, although it may be a desirable mechanism to pursue in future years. Including the cost of energy efficiency in the EDCs' rate base is not desirable, because this option would impose a higher cost on ratepayers. The use of a CAM, on the other hand, would allow for timely collection of funds. It also provides flexibility, by allowing the EDCs to true-up to actual expenditures on a periodic basis, and can address lost distribution revenues. PURA has jurisdiction under Conn. Gen. Stat. §16-19b(c) to implement a CAM to recover all or part of the cost of delivering conservation and load management programs. Connecticut's natural gas distribution companies currently recover their conservation expenditures through a CAM.

A. CAM Level Recommendation

Based on DEEP's analysis of the feasibility of program performance during the ramp up to the all cost-effective level of conservation spending under the Expanded Budget, DEEP recommends that PURA consider implementing a CAM equal to $0.00373/kWh by mid-August 2012, so as to collect approximately $34.2 million in 2012.[35] This amount, together with the anticipated Base Budget revenues of $105.6 million and the 2011 carryover of $18.6 million for CL&P, would recover the full $158.4 million approved by DEEP for expanded C&LM energy efficiency programs.

The precise amount of total CAM revenues collected in 2012 would depend on the timing of PURA's implementation of this cost recovery mechanism. If a CAM is implemented later than mid-August 2012, and the revenues collected are insufficient to fund 2012 C&LM investments, any under recovery should be reconciled in the first CAM reconciliation proceeding. Similarly, any over recovery should be returned to ratepayers or added to the 2013 budget. DEEP recommends that PURA conduct a proceeding every six months after the CAM is established, to adjust the rate to account for variations in actual program spending and lost revenues, and to lower the rate should alternate sources of funding for energy efficiency programs become available that achieve the all cost-effective level.

Going forward, a CAM set at $0.00373/kWh would collect approximately $96 million on an annual basis, and would therefore allow for continued funding of C&LM programs at $202 million, which is approximately equivalent to the all cost-effective level identified in the draft

[35] A CAM set at $0.00373/kWh would collect approximately $96 million on an annual basis.

2012 IRP. Although DEEP recommends that the CAM be set at $0.00373/kWh, DEEP does not authorize spending in 2013 at this time.

B. Lost Revenue Adjustment

DEEP anticipates that the increase in C&LM spending under the Expanded Plan would significantly reduce CL&P and UI sales, and therefore their distribution revenues. The lost sales associated with the Expanded Plan were not considered in the sales forecast used to set rates at the time of CL&P or UI's last rate case proceeding. Therefore, DEEP provides for PURA's consideration the following recommendations with respect to the inclusion of a lost sales provision as part of the CAM.

First, a lost sales provision should not be included in the CAM for UI, which has full decoupling in place.[36] The fundamental purpose of UI's decoupling mechanism is to provide full recovery of allowed distribution revenues due to fluctuations in sales. Because UI's decoupling mechanism captures all changes in sales, its CAM should not include a lost sales provision. Instead, UI's CAM should only address fluctuations in C&LM spending.

Full decoupling has not been implemented for CL&P.[37] As a result CL&P does not have a mechanism in place to recover the distribution revenues that would be lost through the Expanded Plan. Therefore, DEEP recommends that a sales adjustment calculation be included within CL&P's CAM. To avoid the counterproductive results of sales adjustment calculations it is critical that the sales adjustment calculation include an earnings trigger.[38]

DEEP believes that full decoupling is superior to a CAM. Accordingly, DEEP recommends that PURA revisit decoupling in the next rate case for CL&P. Any conservation sales adjustment mechanism established for C&LP should be eliminated if full decoupling were approved for CL&P.[39]

The former DPUC found that the C&LM sales adjustment mechanism was administratively burdensome; encouraged the EDCs to overestimate savings; and incentivized the EDCs to promote sales through their respective conservation programs because it allowed EDCs to keep increased revenues associated with higher sales, and to claim lost revenues due to their participation in conservation programs.[40] Therefore, the DPUC replaced this mechanism with a performance incentive payment and recommended including earnings trigger in future

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[36] DPUC Decision dated June 3, 2009, in Docket No. 08-07-04, Application of The United Illuminating Company To Increase Its Rates and Charges, pp. 116-131; and UI's decoupling mechanism continues to operate on a pilot basis. See, Decision dated August 1, 2011, in Docket No. 08-07-04RE03, Application of The United Illuminating Company to Increase Its Rates and Charges – Review of 2010-2011 Decoupling Mechanism and Pilot, p. 5.

[37] DPUC Decision dated June 30, 2010, in Docket No. 09-12-05, Application Of The Connecticut Light and Power Company To Amend Its Rate Schedules, pp. 165-174.

[38] See, DPUC Decision dated January 18, 2006, in Docket No. 05-09-09, DPUC Investigation Into Decoupling Energy Distribution Company Earnings From Sales, (Decoupling Decision).

[39] See, DPUC Decision dated January 18, 2006, in Docket No. 05-09-09, DPUC Investigation Into Decoupling Energy Distribution Company Earnings From Sales, (Decoupling Decision).

[40] This occurred, for example, through the promotion of efficient air conditioning and heat pumps, which resulted in the increased sales of electric end use devices to consumers who otherwise did not own such devices.

sales adjustment mechanisms, noting that the previous sales adjustment mechanism did not consider CL&P or UI's allowed rate of return or then-current earnings.[41]

VIII. FURTHER PROCEEDINGS

A. Evaluation Roadmap

In its Final Determination of the 2012 Conservation and Load Management Plan dated February 17, 2012, DEEP 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. These recommended changes, summarized in DEEP's February 17, 2012 Final Approval, are to conform to the requirements of Public Act 11-80 to ensure that program evaluations are independent, cost-effective, comprehensive, timely, and that evaluation results are accurately taken into account in program development and implementation. On March 16, 2012, the Energy Efficiency Board submitted to DEEP its revised changes as the EEB Program Evaluation and Market Assessment Roadmap (Energy Efficiency Board Evaluation Roadmap). DEEP reviewed the Energy Efficiency Board Evaluation Roadmap, and has made additional modifications to the Roadmap to ensure the independence of evaluation results and to clarify specific provisions.[42]

B. Compliance Reporting

DEEP directs the EDCs to provide quarterly reporting on energy and demand savings, program cost delivery, and loan volume and activity, as well as the implementation of the additional measures related to the HES program, discussed above. The EDCs are in the process of establishing a dashboard for reporting C&LM program activity and spending. To facilitate this quarterly reporting the dashboard should include the information being required herein.

C. Development of 2013 Conservation and Load Management Plan

As discussed herein, the EDCs project significant increases in energy and demand savings and a concomitant reduction in the cost per kWh to deliver these savings. To achieve these goals will require that consumers are willing to invest in energy efficiency; market transformation is accelerating; education is inducing behavioral change; and codes and standards are impacting markets. Success in achieving these milestones requires the support from the vendor community.

In the C&LM Plan for 2013, the EDCs should provide detailed information about how they have met the participation and savings goals established in the 2012 C&LM Plan, while maintaining program quality and customer satisfaction. This information will inform DEEP's decision to approve, modify, or reject the 2013 C&LM Plan, particularly with respect to any requested increase above the level of spending approved in the 2012 C&LM Plan. In addition,

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[41] *See*, Decoupling Decision at 17-20.

[42] The revised EEB Program and Market Assessment Roadmap, approved by DEEP, are posted on the EEB website, http://www.ctenergyinfo.com/2012%20EEB%20Program%20Evaluation%20Roadmap%20revised%203-16-12%20final.pdf.

the EDCs and EEB should address the following issues and report their recommendations in the 2013 C&LM Plan:

- **Self-Directed Energy Efficiency Pilot.** Self-directed energy efficiency programs allow large commercial and industrial customers to self-direct all or a portion of their C&LM charges towards customized efficiency investments. The EDCs and EEB should review existing programs and potential enhancements for large customers' energy investments, and consider whether self-directed programs would better serve this customer class.

- **C&I Incentive Caps**. The EEB should evaluate the appropriateness of the $1.5 million C&I incentive cap after the first year of the Expanded Plan.

- **Non-Distribution Alternatives.** Targeted C&LM activity may provide the opportunity to defer or avoid distribution related costs, providing non distribution alternatives to the EDCs. DEEP is unaware of any past programs that may have addressed this issue. In the 2013 C&LM Plan, the EDCs should identify any distribution projects that can be avoided or deferred by implementation of particular conservation programs, and the costs and savings associated with those programs.

- **Long Term Goals.** The projected energy and capacity savings identified through the IRP must be achieved to protect ratepayer interests. Therefore, EDC incentives must develop long-term energy and demand targets for the 2013 C&LM Plan to meet the goals for 2022 that are established in the 2012 IRP.

D. Multi-Year Planning

Since 2000, the EDCs have submitted annual C&LM Plans on or about October 1st of each year. Going forward, DEEP believes that it will be beneficial to transition to a multi-year schedule for development and approval of C&LM plans, at such time when program ramp up has concluded successfully and program spending stabilizes at an all-cost effective level. Multi-year planning can provide greater clarity to program participants and allow for long-term planning, therefore improving the overall quality and effectiveness of conservation programs. Moreover, DEEP expects that periodic CAM adjustment proceedings will allow for regular opportunities to review program spending and performance in the interim periods between the approval of new, multi-year plans. DEEP therefore directs the EEB and EDCs to develop a proposal for development, approval, monitoring, and modification of CL&M programs on a multi-year basis including the consolidation of proceedings for gas and electric plans.

IX. SUMMARY OF DETERMINATION

The Department, in this determination, reviews, modifies, and approves the 2012 C&LM Plan Expanded Budget, including the cost-effectiveness of the programs that would be funded by the Expanded Budget. As described above, DEEP has determined that approval of increased funding for energy efficiency up to a total spending level of $158.4 million in 2012 is necessary to implement the policies identified in the 2012 Integrated Resources Plan (IRP) to mitigate an increase in electricity rates expected to occur after 2017, as well as to comply with several statutory mandates, including Section 16a-3a of the General Statutes of Connecticut, and the various requirements enacted in Public Act 11-80, An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future (Act).

Having reviewed the programmatic cost and savings information provided by the EDCs, DEEP concludes that, overall, the Expanded Plan is cost-effective. This determination is consistent with decisions of the former DPUC, which has allowed oil subsidies for low income customers and approved low income programs that pass the Total Resource Test. As programs ramp up, the EDCs will be required to provide quarterly reporting on customer participation, program activity and cost-effectiveness. Further, DEEP has conditioned its approval of the Expanded Budget on the EDCs' implementation of additional measures, which will improve the cost-effectiveness of the HES programs, and has directed the EDCs to submit quarterly compliance reports to the DEEP, to demonstrate progress in achieving the strategies discussed in this determination for improving the cost-effectiveness of the programs. DEEP is also satisfied that the Expanded Plan adequately ensures equity between customer classes and that the EEB has provided a reasonable analysis to demonstrate that equitable distribution of program participation has been achieved.

As identified in the 2012 IRP, the unit cost to deliver efficiency must decline to assure that increased savings are achieved while minimizing rate increases. The Expanded Plan includes more financing and performance contracting to lower costs. The cost of financing for C&I customers must be reduced and other cost-cutting measures aggressively pursued. For these reasons, the Department modified the Expanded Budget pursuant to its authority under Section 16-245m(d)(1), by increasing the amounts allocated to self-funding of residential loans; implementing self-funding for C&I financing; and reducing allowed consultant costs and allocating those funds to the education budget, which must be increased to support the expansion of efficiency programs. The modifications discussed herein are intended to reduce unit costs and ratepayer subsidies. These efforts must be expanded in the years to come to reach the aggressive savings and unit cost goals outlined in the 2012 IRP. Accordingly, in this determination, DEEP directs the EDCs and EEB to evaluate the opportunity to expand these efforts in the 2013 CL&M Plan. DEEP also directs the EEB and EDCs to develop a proposal for development, approval, monitoring, and modification of CL&M programs on a multi-year basis, including the consolidation of proceedings for gas and electric plans.

DEEP requested additional information from the EDCs to evaluate the feasibility of expanding existing C&LM programs, including maintaining the quality and cost-effectiveness of those programs at expanded levels of activity. Based on this information, DEEP concludes that the EDCs can ramp up to a total spending level of $158.4 million in 2012 while maintaining program and vendor quality. At this level, $34.2 million, rather than the proposed $96.3 million, would be needed to fund program activity under the Expanded Budget for 2012. To recover this amount, DEEP recommends that a CAM be implemented by PURA. If the CAM is implemented by mid-August 2012 or later, DEEP recommends that PURA set the rate at $0.00373/kWh to recover the $34.2 million in incremental revenues necessary to support the total 2012 approved budget of $158.4 million.[43] Funding at this level in 2012 would enable the EDCs to ramp up program activity in a gradual, more controlled way for the remainder of 2012, while positioning the EDCs to deliver conservation programs at the expanded, all cost-effective level in 2013. DEEP makes no recommendation regarding recovery of the $17 million for oil funding as proposed in the Expanded Plan.

In consideration of the foregoing, the Department of Energy and Environmental Protection proposes to approve the 2012 Conservation and Load Management Expanded Budget.

Dated: June 5, 2012

Daniel C. Esty,
Commissioner

[43] CAM rate is estimated using the EDC's forecasted sales data as submitted in Docket 11-12-01 and a gross receipts tax rate of 1.0749%.

DRAFT – FOR PUBLIC COMMENT

APPENDIX A

2012 Feasible Spending - CL&P and UI Responses to DEEP's May 25, 2012 Data Request.

CL&P/UI C&LM BUDGET	2012 CL&P Proposed Base Budget	2012 CL&P Change to Base Budget	2012 CL&P Revised Budget	2012 UI Proposed Base Budget	2012 UI Change to Base Budget	2012 UI Revised Base Budget	2012 CL&P/UI Expanded Budget Total
RESIDENTIAL							
Residential Retail Products	$ 4,850,000	$ 3,580,000	$ 8,430,000	$ 1,755,855	$ 844,725	$ 2,600,580	$ 11,030,580
Appliance Rebate Program	$ -	$ 3,100,000	$ 3,100,000			$ -	$ 3,100,000
Total - Consumer Products	**$ 4,850,000**	**$ 6,680,000**	**$ 11,530,000**	**$ 1,755,855**	**$ 844,725**	**$ 2,600,580**	**$ 14,130,580**
Residential New Construction	$ 1,261,000	$ 139,000	$ 1,400,000	$ 177,329	$ -	$ 177,329	$ 1,577,329
Home Energy Solutions (HVAC, Duct Sealing, Lighting)	$ 11,757,000	$ 3,546,000	$ 15,303,000	$ 2,281,658	$ 2,077,789	$ 4,359,447	$ 19,662,447
HES Income Eligible	$ 9,399,700	$ 5,244,300	$ 14,644,000	$ 2,118,093	$ 2,250,000	$ 4,368,093	$ 19,012,093
Subtotal Residential	**$ 27,267,700**	**$ 15,609,300**	**$ 42,877,000**	**$ 6,332,935**	**$ 5,172,514**	**$ 11,505,449**	**$ 54,382,449**
COMMERCIAL & INDUSTRIAL							
C&I LOST OPPORTUNITY							
Energy Conscious Blueprint	$ 8,503,000	$ -	$ 8,503,000	$ 2,386,221	$ 882,015	$ 3,268,236	$ 11,771,236
Total - Lost Opportunity	**$ 8,503,000**	**$ -**	**$ 8,503,000**	**$ 2,386,221**	**$ 882,015**	**$ 3,268,236**	**$ 11,771,236**
C&I LARGE RETROFIT							
Energy Opportunities	$ 13,241,680	$ 10,154,320	$ 23,396,000	$ 2,957,319	$ 3,268,116	$ 6,225,435	$ 29,621,435
O&M (Services, RetroCx, BSC)	$ 4,171,000	$ 829,000	$ 5,000,000	$ 631,298	$ 857,277	$ 1,488,575	$ 6,488,575
PRIME	$ 485,000	$ 15,000	$ 500,000	$ 116,141	$ 123,543	$ 239,684	$ 739,684
Total - C&I Large Retrofit	**$ 17,897,680**	**$ 10,998,320**	**$ 28,896,000**	**$ 3,704,758**	**$ 4,248,936**	**$ 7,953,694**	**$ 36,849,694**
Small Business	$ 11,640,000	$ 8,360,000	$ 20,000,000	$ 2,227,636	$ 750,000	$ 2,977,636	$ 22,977,636
Subtotal C&I	**$ 38,040,680**	**$ 19,358,320**	**$ 57,399,000**	**$ 8,318,615**	**$ 5,880,951**	**$ 14,199,566**	**$ 71,598,566**
OTHER - EDUCATION *							
SmartLiving Center® - Museum Partnerships	$ 400,000	$ 350	$ 400,350	$ 481,746	$ -	$ 481,746	$ 882,096
EE Communities / Behavior Pilot	$ 1,000,000	$ 380,000	$ 1,380,000	$ 300,000	$ -	$ 300,000	$ 1,680,000
K-8 Education	$ 325,000	$ -	$ 325,000	$ 401,825		$ 401,825	$ 726,825
Science Center	$ 166,000	$ -	$ 166,000	$ 42,000		$ 42,000	$ 208,000
Subtotal Education	**$ 1,891,000**	**$ 380,350**	**$ 2,271,350**	**$ 1,225,571**		**$ 1,225,571**	**$ 3,496,921**
OTHER - PROGRAMS/REQUIREMENTS							
Institute for Sustainable Energy (ECSU)	$ 448,000	$ -	$ 448,000	$ 112,000		$ 112,000	$ 560,000
Residential Loan Program (Includes ECLF)	$ 2,051,429	$ 3,998,571	$ 6,050,000	$ 347,280	$ -	$ 347,280	$ 6,397,280
C&I Loan Program	$ 500,000	$ -	$ 500,000	$ 50,000	$ 85,000	$ 135,000	$ 635,000
C&LM Loan Defaults	$ 150,000	$ 25,000	$ 175,000	$ 50,000		$ 50,000	$ 225,000
Subtotal Programs/Requirements	**$ 3,149,429**	**$ 4,023,571**	**$ 7,173,000**	**$ 559,280**	**$ 85,000**	**$ 644,280**	**$ 7,817,280**
OTHER - LOAD MANAGEMENT							
ISO Load Response Program	$ 3,500,000	$ -	$ 3,500,000	$ 1,376,000	$ (1,376,000)	$ -	$ 3,500,000
Subtotal Load Management	**#REF!**	**$ -**	**$ 3,500,000**	**$ 1,376,000**	**$ (1,376,000)**	**$ -**	**#REF!**
OTHER - RENEWABLES & RD&D							
Research, Development & Demonstration	$ 350,000	$ -	$ 350,000	$ 225,000		$ 225,000	$ 575,000
Subtotal Renewables & RD&D	**$ 350,000**	**$ -**	**$ 350,000**	**$ 225,000**		**$ 225,000**	**$ 575,000**
OTHER - ADMINISTRATIVE & PLANNING							
Administration	$ 900,000	$ 250,000	$ 1,150,000	$ 750,000	$ -	$ 750,000	$ 1,900,000
Marketing Plan	$ 200,000	$ 300,000	$ 500,000	$ 50,000	$ 200,000	$ 250,000	$ 750,000
Planning (UI Planning & Evaluation)	$ 650,000	$ 50,000	$ 700,000	$ 316,765	$ 1,190	$ 317,955	$ 1,017,955
Evaluation (UI Evaluation , Outside Services)	$ 2,010,000	$ -	$ 2,010,000	$ 570,000		$ 570,000	$ 2,580,000
Information Technology	$ 1,700,000	$ 50,000	$ 1,750,000	$ 342,500	$ -	$ 342,500	$ 2,092,500
Energy Efficiency Board	$ 550,000	$ 50,000	$ 600,000	$ 300,000	$ 50,000	$ 350,000	$ 950,000
Performance Management Fee	$ 3,982,940	$ 2,237,060	$ 6,220,000	$ 1,003,333	$ 498,183	$ 1,501,516	$ 7,721,516
Admin/Planning Expenditures	**$ 9,992,940**	**$ 2,937,060**	**$ 12,930,000**	**$ 3,332,598**	**$ 749,373**	**$ 4,081,971**	**$ 17,011,971**
PROGRAM SUBTOTALS							
Residential	$ 31,056,929	$ 20,152,151	$ 51,209,080	$ 7,781,037	$ 5,332,514	$ 13,113,551	$ 64,322,631
C&I	#REF!	$ 19,519,390	$ 62,063,270	$ 9,969,364	$ 4,629,951	$ 14,599,315	$ 76,662,585
Other*	$ 10,590,940	$ 2,637,060	$ 13,228,000	$ 3,619,598	$ 549,373	$ 4,168,971	$ 17,396,971
TOTAL Note 1	**#REF!**	**$ 42,308,601**	**$ 126,500,350**	**$ 21,369,999**	**$ 10,511,838**	**$ 31,881,837**	**$ 158,382,187**