

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC UTILITY CONTROL

DPUC REVIEW OF THE 2011 CONSERVATION AND LOAD MANAGEMENT PLAN	:	DOCKET NO. 10-10-03
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DPUC REVIEW OF THE CONNECTICUT GAS UTILITIES JOINT CONSERVATION PLANS	:	DOCKET NO. 10-10-04
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	:	December 6, 2010

BRIEF OF THE
OFFICE OF CONSUMER COUNSEL

I. INTRODUCTION

The Office of Consumer Counsel (“OCC”) hereby submits its brief in the above-captioned dockets, the Department of Public Utility Control’s (“Department” or “DPUC”) annual review of the Conservation and Load Management (“C&LM”) programs administered by The Connecticut Light and Power Company (“CL&P”), The United Illuminating Company (“UI”) (together, the “EDCs”), Yankee Gas Services Company (“Yankee”), Connecticut Natural Gas Corporation (“CNG”), and The Southern Connecticut Gas Company (“SCG”) (together with the EDCs, the “Companies”).

OCC retained Hudson River Energy Group (“HREG”) as its consultant to assist in OCC’s review and the development of recommendations for these

dockets. Because of the breadth of topics covered under this docket and the condensed schedule (3 months) under which it was conducted, OCC focused on certain key areas for its review and recommendations to the Department. In particular, OCC focused on program goals and Company incentives; the process of evaluation, measurement and verification (“EM&V”) of program savings; administration and reporting to the Department; the gas programs, and the filing schedule and future direction of the program. Of these subjects, OCC particularly focused on program EM&V, which is foundational to public confidence in the programs’ claimed savings. OCC is hopeful that the Department will require an earlier filing date next year, as further set forth below, so that a more thorough review may be performed.

II. **BACKGROUND**

Most of the programs in the CL&M plan have been in place for years, many even pre-dating the current plan format, and have yielded energy savings and emissions reductions over a sustained period. The 3 mill per kWh ratepayer funding mechanism has been extremely successful in providing financial support for the programs.¹ The EDCs have personnel in place to perform the various administrative functions associated with the program and work with regional organizations on common issues. Relationships have been established with energy efficiency contractors performing new construction and retrofitting activities, and a collaborative and inclusive process with stakeholders facilitates stakeholder involvement. The organizational infrastructure is well developed at

¹ In fact, the effort is in danger of becoming a victim of its own success and being tapped for purposes other than energy efficiency.

the utility and stakeholder level, as witnessed by the size of the utility staffs involved in energy efficiency programs and the use of input from consumers, the business community, state agencies, low income representatives, and the environmental community. Connecticut is recognized nationally as one of the leaders in the field of energy efficiency. In other words, Connecticut's C&LM Program is at a relatively mature stage. (Pre-filed Testimony of Hudson River Energy Group ("HREG PFT") at 10-11.)

Overall, the C&LM programs have a good initial structure. During the last three to four years, there has been an explosion of interest in energy efficiency throughout the country, with a concomitant increase in the level of sophistication of energy efficiency portfolios being offered nationally. Furthermore, energy building codes and federal appliance standards are changing significantly. Given this change in the energy efficiency industry, it makes sense to reexamine the practices underlying the C&LM portfolio and ensure that current best industry practice is being considered and incorporated.

Though the C&LM Program is relatively mature, the DPUC has noted deficiencies and areas for improvement in the C&LM plans in the past and has ordered changes. In Docket No. 03-11-01, Phase 2, the Department recommended that the Energy Efficiency Board ("EEB") develop a process that assures independence from the Companies in the selection and content of third party program evaluations. In the 2009 C&LM Decision the Department discussed problems associated with the goal setting process and directed the EDCs to propose long-term goals in the 2010 C&LM filing (Final Decision, Docket No.

08-10-03 at 30). In its 2010 C&LM Decision, the Department reiterated its requirement of the prior year that the Companies include overall goals for mW and \$/kW reductions in this year's plan, including long-term goals. (Final Decision, Docket No. 09-10-03 at 56.) In the 2010 Integrated Resource Plan ("IRP") Decision, Docket No. 10-02-07, the Department endorsed a goal for the C&LM Programs of zero load growth. To help achieve this goal, the Department announced that it "... will pursue greater efficiency through strategies it has encouraged for many years . . . [and] continue to examine and refocus all C&LM programs to maximize energy efficiency at the lowest possible cost." (IRP Decision at 49.) OCC examined progress in these and other areas in this docket.

While Connecticut has strong C&LM programs with personnel in place to perform functions, it is also a fact that energy efficiency is becoming more mainstream and efficiency standards are increasing. As such, the bar has been raised making it more difficult to find low hanging fruit. Consequently, programs need to be more focused on making the most out of every ratepayer dollar. It is against this backdrop that OCC reviewed the 2011 C&LM Plan and makes is recommendations for improvements.

III. ARGUMENT

(A) Incentives and Goals

Utility incentives should be based on the achievement of energy savings and demand reduction goals in a cost-effective manner. This places the emphasis on the behavior that is most important – reaching pre-determined energy savings goals and demand and emission reductions targets. Consistent with that

emphasis, certain incentives should be discontinued, and the DPUC should adopt disincentives for failure to comply with DPUC orders, rather than only providing incentives for simple compliance. This should help curb the apparent trend of the Companies ignoring Department directives while at the same time earning their full financial incentives for administering the C&LM Plan. In particular, the large incentives for customer awareness of the CEEF and for achieving target socket penetration levels should be discontinued (HREG PFT at 18).

i. Goals

OCC Testimony articulated several guiding principles for the C&LM Plan:

- 1) The Plan should have long term, stable goals that are expressed in terms of energy savings (kWh and therm reductions), measurable emissions reductions (typically CO₂, NO_x, and SO_x), and demand reductions (kW savings). (HREG PFT at 13-16.)
- 2) Those goals should not change dramatically year-to-year absent extraordinary events. This allows customers, vendors, manufacturers, retailers, and other stakeholders to participate in programs in a thoughtful way and to make long-term energy and business plans based on the jurisdiction's commitment to providing high quality energy saving programs that offer opportunities for all customers to participate and that benefit the entire body of ratepayers. (Id.)
- 3) The energy efficiency goals should reflect the IRP planning process. The goals development process should not be initiated by the Companies, although they should provide input about areas that they believe will benefit

from increased focus. Within the C&LM Plan, standardized information about program goals (such as number of participants, energy savings targets, demand reduction targets, emission reduction targets) should be included for every program. (Id.)

- 4) Portfolio goals should achieve and maintain a reasonable balance between energy and capacity savings. Long term energy and load reduction goals should be established first, based on clear and explainable objectives, with programs then developed that will best achieve those goals. The goals should be highlighted in the planning process and reporting should focus on how the program is doing relative to the goals using the standardized information mentioned in Paragraph 3 above. Long term goals for energy (electric and natural gas), demand, and emission reductions should not simply be the sum of energy savings from individual programs, but instead should be geared toward achievement of a tangible long-term objective informed by the most current IRP decision. (Id.)

- 5) The Plan should also include information about the benefit-cost results for individual program measures as well as for individual programs and for the portfolio as a whole, to assist decision-makers in determining whether the measures included within individual programs are appropriate and whether the allocation of funds among programs is reasonable. (Id.)

OCC's analysis showed something quite different. The C&LM Plan specifies electric program level energy and load reduction goals, prepared by the EDCs, which appear in Table B and Exhibit IV of the Plan. Within the descriptions

of individual programs within the plan, goals are expressed as individual utility goals, not as goals for the portfolio as a whole. Furthermore, the Plan does not include information about achievement of goals for gas portions of the programs.

In addition, goals for multi-year energy and load savings and progress toward achieving multi-year goals are not discussed in the plan. Nor is there clearly expressed tie-in to the last IRP Decision or any of its findings. Similarly, overall emission reduction goals and progress toward their achievement are not addressed. (HREG PFT, p. 14.)

This is not the first time those issues have surfaced, and the Department has already identified the "cart and horse" problem. Last year's C&LM Decision stated,

In the 2009 C&LM Decision the Department discussed problems associated with the goal setting process. The major problem is that the goals are established after the programs are planned. This can result in the EDCs meeting or exceeding their goals annually while programs become more costly and less cost-effective over time. The Department directed the EDCs to work with the ECMB and propose long-term goals in the 2010 C&LM filing. (2009 C&LM Decision, p. 30) The proposed incentive plan does not include any long-term goals and none have been proposed to date.

(2010 C&LM Decision, p. 56).

In response, the EEB is of several minds. First, EEB denies that it does not have long term goals, pointing to both Table B and Exhibit IV in the 2011 C&LM filing as proof that it does have such goals (EEB Comments at page 3). Then, EEB states that volatility in funding levels has made it extremely challenging to develop and propose longer-term goals (Id. at 4). Finally, EEB sidesteps the whole discussion by stating that the IRP process is the most appropriate forum

and process for setting longer-term goals, that it proposed longer-term goals and alternate scenarios through its participation in the IRP process, and that C&LM annual and multi-year Plan goals generally have been developed within the context of the longer-term goals discussed in the IRP process (Id.). EEB's menu of responses reinforces the Department's conclusion cited above.

It appears that the EEB and the EDCs need a more forceful and effective tool to engage them in the planning process. This should be handled through the incentive process (further discussed below), including positive incentives for progress toward achievement of measurable long term goals and negative incentives for failure to meet those goals or for failure to follow specific Department orders.

ii. Incentives

The DPUC's decision on the 2010 CL&M Plan stated that "Approximately 90% of the goals are for electric system benefits and electric system benefits less program costs...The remaining 10% of the incentives are for individual programs goals." (C&LM Decision, March 17, 2010, p. 56.) As pointed out in that Decision, "These [goals] are generally for conducting workshops or training events but do not directly incent lower costs of kWh/kW reductions for individual programs." (Id., 56.)

OCC's review found that the 2011 Plan has increased the percentage of incentive funding for specific programs to about 30%. (2011 C&LM Plan, Exhibit IV.) For example, in the 2011 C&LM Plan, the Companies will receive an incentive award if they jointly conduct four sessions on the Small Business Program or if 20

Home Energy Solutions – Income Eligible projects are undertaken statewide. Simply conducting public awareness or instructional sessions, or implementing very specific programs directed by the Department should not require incentives. Rather, failure to follow Department directives should subject the Companies to a disincentive. Certain specific, high dollar value incentives require revisiting, as they are becoming obsolete. There are known upgrades in federal efficiency standards and changes in the marketplace that will be taking place over the next several years which will phase out current incandescent bulbs and should make CFL bulbs the de facto baseline. Lighting incentives going forward should be given only for measures that are significantly more energy efficient than what the energy standards require. It is time to re-evaluate and continue a phase-out and significant redirection of current lighting incentives for customers (current rebates) and the Companies (current incentives to shareholders). With respect to socket penetration -- the percent of installed bulbs CFLs as compared to total bulbs - - C&LM Plans call for incentives for increasing CFL socket penetration, currently valued at \$403,567 for CL&P and \$97,962 for UI (2011 C&LM Plan Exhibit 4, pages 393 and 399 respectively). Those incentives will no be longer relevant or appropriate going forward beyond the 2011 Plan. (HREG PFT at 17 – 18.)

In a similar vein, the utility incentive amounts available for “Increasing CEEF Fund Awareness” (also now valued at \$403,567 for CL&P and \$97,962 for UI) are large and disproportionate to incentive amounts for achievement of other goals, particularly since the program has matured. (2011 C&LM Plan Exhibit 4, pages 394 and 401 respectively.) To the extent the Department is concerned that

the Companies are not properly crediting CEEF and electric ratepayers in their advertising and marketing, any such finding should be accompanied by a disincentive.

OCC has also observed instances where program evaluations were unreasonably delayed. For example, as further discussed below, the evaluation of the Home Energy Solutions (“HES”) program, the flagship residential program, has been going on for over two years and is still in the draft state. Responses to OCC-7, OCC-8, OCC-14 and OCC-23, demonstrate that delays can be largely attributed to Company over-involvement in the evaluation process. OCC consultants can see no logical reason for this level of back and forth and deliberations for such a program evaluation. The DPUC should have the ability to reduce incentive payments for this and similar evaluations where there are inordinate delays caused by utility involvement in the evaluation process.

Going forward, OCC recommends a number of improvements to the C&LM incentive process:

- 1) Incentives for customer awareness should be discontinued.
- 2) Emphasis on incentives for specific programs should be reduced. We believe that the vast majority, if not all, utility incentives should be based on achievement of measurable energy saving and demand reduction goals in a cost-effective manner.
- 3) The DPUC should reserve the right to reduce incentive awards if it finds problems with the EM&V results (e.g., in the form of delays or changes to data input into formulas without adequate explanation).

- 4) If a company fails to implement specific directives, that should be grounds for reduction in the incentive payment levels. A disincentive should be established if the Companies do not include clear long term measureable goals in line with the DPUC's most recent IRP decision. The DPUC should be the sole judge of the adequacy of the goal setting process and the disincentive should be significant, perhaps as much as 25% of the total incentive level.

(B) Evaluation and Cost Effectiveness

OCC dedicated significant resources in this docket to evaluating the EEB's current evaluation, measurement and verification ("EM&V") processes in order to determine if they are, in fact, independent, and whether they could be more efficient. As described below, several areas for improvement have emerged during the course of discovery and the hearings in this docket:

- Currently the EDCs have far too much interaction with the independent evaluation consultant ("Evaluation Consultant") and the contractors hired to perform the evaluations ("Evaluation Contractor") during the course of each evaluation, including apparent attempts by the EDCs to influence the methodologies and outcomes of the evaluation in an "off the record" manner;
- Data collection issues have stalled or compromised evaluations;
- There is no process in place to ensure that the EDCs incorporate evaluation results and Evaluation Contractor feedback into the PSD and future evaluation planning as appropriate;

- In at least one case, contracting issues have stalled an evaluation for months.

OCC's PFT contained several recommendations for improvements to the EEB's EM&V, which improvements should increase the independence of the evaluation process and also make the process more efficient and, therefore, less expensive. OCC describes the deficiencies remaining in this process and incorporates and expands on its previous recommendations below.

i. Evaluation Process History

The evaluation roadmap has been an evolving process in annual C&LM dockets over the last several years. In 2007, the only Department directive with respect to the Evaluation Roadmap was as follows:

The Department will require in this and future annual C&LM review dockets for the Companies to deliver to the Department paper copies of each study in a timely fashion after its completion. The Department will direct the Companies to schedule a meeting with the Department, preferably on the same day or as part of an ECMB meeting. At that time the ECMB and/or third party consultants will make a presentation of the highlights of the study. After reviewing the study, the Department may elect to send the ECMB a letter under the contemporaneous docket, with any analysis or directives arising from the study results.

(Final Decision, Docket No. 07-10-03 at 40.) Thus, the Department's concern in 2007 was ensuring that the Department had an opportunity to receive feedback after each evaluation.

In the 2008 C&LM docket, OCC advocated for a more independent evaluation process, with less control by the Companies and ECMB program-planning consultants. The Department found as follows:

The ECMB program-planning consultants and the Companies have an interest in the outcomes of any evaluation of the programs. As a result, it is critical that the evaluation process be unbiased and transparent. To provide credible results, persons planning the programs should not evaluate them also. The ECMB Evaluation Committee and their consultant must be independent from and totally responsible for all aspects of the evaluation process. The Department, therefore, requires that the ECMB Evaluation Consultant report directly to the ECMB Evaluation Committee. Absent payment for the evaluation, the Department also requires that the ECMB Evaluation Consultant have no financial or business ties to CL&P, UI, ECMB members other ECMB consultants who plan the C&LM programs.

To assure that all requirements are met and evaluations are technically accurate, development of evaluation priorities and scheduling as well as the RFPs for evaluations shall be developed with input from all ECMB members. The Department understands the need for some interaction between the ECMB program-planning consultants, the Companies, and therefore will not preclude such interaction.

The ECMB Evaluation Committee shall be responsible for selecting evaluation consultants with no vote from the Companies, other consultants or ECMB members. The Department agrees with the OCC regarding the need for transparency in this process. Based on the foregoing, the Department directs that ECMB evaluation process be modified as follows. All RFP comments and reviews when selecting consultants must be done in writing. Evaluation reports, including drafts prepared by the ECMB Evaluation Consultants, shall be submitted to the ECMB Evaluation Committee. The Committee shall then issue them to the Companies, ECMB members and the planning consultants for written comment that shall become part of ECMB's public record. The Committee is then free to accept, modify or reject any recommendations.

(Final Decision, Docket No. 08-10-03 at 31-32 (emphasis added).)

In the 2009 C&LM Docket, the Department appeared to take a position more favorable to increased Company input in response to Company testimony that they did not have adequate input. Final Decision, 09-10-03 at 55-56.

Discovery in the instant docket has made clear, as further set forth below, that

these Department findings were based on a misunderstanding about the actual involvement of the Companies and the EEB Evaluation Committee in the process of Evaluations.

ii. Company Interaction with Evaluation Consultant and Contractors During Evaluations Negates the Independence of Evaluations

By OCC-7, OCC requested, in part, “all written communications and comments to the Evaluation Consultant from the EDCs, any ECMB member or consultant not on the Evaluation Committee, and the Evaluation Contractor regarding the HES Evaluation.” In response, the ECMB’s Evaluation Consultant noted that “during the course of the HES evaluation, approximately 380 emails and many redline reviews of draft documents were created by the EDCs, and the Evaluation Contractor . . .”. (OCC-7.) The Companies either initiated, responded to, or are copied on the vast majority of the approximately 380 emails cited by the evaluation consultant. (LFE-7, Tr. at 170.) The number of emails in the HES study is unusual because it has gone on so long, but the “percentage” of Company involvement is typical. (Tr. at 170-71.) Moreover, the Companies are typically involved in non-public meetings and discussions with the Evaluation Consultant and the Evaluation Contractors during the course of studies. (Tr. at 170-71.)

Most troublesome are apparent attempts by the Companies to influence the methodologies and outcomes of the evaluation in an “off the record” manner. This was made apparent in OCC’s review of emails provided by the Evaluation Consultant in response to OCC-7, OCC-14 and LFE-7.² To provide one example

² While OCC was provided the majority of emails responsive to OCC-7 as an audit data request, they were to be filed in their entirety by the EEB as Late Filed Exhibit 7. As of this writing, they

with respect to the HES evaluation, an email from a CL&P employee to the Evaluation Consultant summarized his own and other CL&P employees' substantive feedback on a draft of the evaluation.³ (LFE-7, email from Gene Fry dated 8/26/10, attached hereto as Exhibit A.) In the email, a CL&P employee states his opinion that the results of the evaluation are understating the effects of the program as well as his concern that "OCC is going to push for similar analysis on ALL evaluations going forward." (Exhibit A at page 3 of 4 (emphasis in original).) The employee further states that the "[b]ottom line is that I think we need some well crafted language in the evaluation (and in the 2011 Plan) that addresses these issue [sic] BEFORE the OCC brings them up." (Id. (emphasis in original).) Thus, CL&P's comments to the Evaluation Consultant include attempts to make evaluation language more favorable to the programs.

In reviewing the "approximately 380 emails" between the Companies, Evaluation Consultant, and Evaluation Contractor during the course of the HES evaluation, very few of those emails were addressed to or came from members of the EEB's Evaluation Committee, or even copied those members. However, most of them did include the Companies, as did meetings that were held while the new process the Companies have complained about was already underway.⁴

To further illustrate the persistent lack of independence in the evaluation process, in response to OCC-16, the Evaluation Consultant states that

were not yet filed, although one email was filed as LFE-7 by OCC. The EEB has been ordered to file the remaining emails with any confidential customer information redacted by today's date. The late filing of this exhibit makes citation for purposes of briefs difficult.

³ It is clear from the contents of the email that the feedback was intended to be "off the record", which contradicts the DPUC's 08-10-03 Decision which requires comments on evaluation drafts to be made part of the public record.

⁴ The Evaluation Consultant testified that "the Evaluation Roadmap 2010 was in place for that year. Adherence to it was incremental as new procedures often are." Response to OCC-12.

“[c]omments, both written and provided verbally through these phone meetings are conveyed directly to the Evaluation consultant. There may be many rounds of comments in the attempt to reach consensus.” Respectfully, OCC submits that independent evaluations should not include attempts to reach a consensus with the entities whose work is being evaluated.

One example of this consensus-building approach is the Limited Income Program Evaluation. The Limited Income Evaluation Consultant, KEMA, found that only 59.6% of the lighting reported in the tracking system was found in service during the on-site visits. (Final Report, Evaluation of the Weatherization Residential Assistance Partnership (WRAP) and Helps Programs, page 4-2.) Since the Limited Income program has contract vendors install the lights the fact that only 59.6% were found installed caused quite a stir among the EDCs following the issuance of the draft report. What followed was an exchange of e-mails regarding how to reflect the findings in the final evaluation and the PSD, and indeed if they should be reflected. (LFE-14, attached hereto as Exhibit B.)

Dozens of emails regarding how to treat the missing light bulbs in the final evaluation were exchanged between the Companies, the Evaluation Consultant and KEMA. (Exhibit B.) Early in this email debate, the Evaluation Consultant stated in an email to UI that “program savings doesn’t match realization rate as defined below. The gap is pretty large since CFLs are such a large portion of the savings. That gap is going to be difficult to explain when the report goes to the Board/Evaluation Committee and the Department. I’m not sure what’s the best and most transparent method of addressing this gap.” She then suggests a

couple of ways to “address the gap with some transparency”, and says she is “open to other suggestions.” (Exhibit B at 14.)

Exhibit B demonstrates that there were multiple examples of substantive discussions between the Limited Income Program Evaluation Contractor (KEMA) and UI, and not including the Evaluation Consultant, regarding the lighting results as well as other substantive issues, while KEMA was still in the drafting stage. For example, KEMA reported to the Evaluation Consultant that it met with UI staff off-the-record “to better understand the needs of UI.” (Exhibit B at 41.) This email explains in some detail the substantive changes UI was seeking to the draft evaluation. UI later contacted the Evaluation Consultant regarding UI’s off-the-record meeting with KEMA, stating “I had a nice meeting with Tom, we discussed the issues with the way the data was presented to date, the needs for the PSD and Tom saw the logic with the changes we are requesting.” (Exhibit B at 37.) UI also twice initiated an email discussion with KEMA regarding their concerns about the draft evaluation without copying the Evaluation Consultant on the emails. (Exhibit B at 7 to 10, 11.) KEMA also brought to the attention of the Evaluation Consultant a phone call KEMA received from UI regarding UI’s concerns about the lighting results. (Exhibit B at 5.)

Commenting on KEMA’s draft report, a member of UI’s staff disagreed with incorporating the lighting results into a realization rate in the final evaluation as suggested by KEMA, and alternatively suggested that “[p]erhaps what is needed is recognition in the report that the lighting was removed at some point in time before the site visits and that a follow up persistence study is appropriate.” (Exhibit B at

52.) If this UI suggestion were accepted, the data concerning the missing bulbs would not be incorporated into the PSD or impact claimed program savings. In contrast, an NU staff member agreed with KEMA that the results should be part of the realization rate, because doing otherwise would “result in over-stated savings.” (Exhibit B at 50.)

The emails provided with OCC-7 and OCC-14 are troubling for a variety of reasons. Overall, they demonstrate that the evaluation process is not independent under the Evaluation Roadmap, because the Companies have a substantial amount of opportunity for influence over how evaluation results are reported in final evaluations issued by Evaluation Contractors. Moreover, the evaluation process is not transparent to outsiders because the communications between the Companies, the Evaluation Consultant and Evaluation Contractors are conducted off the record, and sometimes do not even include the Evaluation Consultant.

Clearly, any complaint by the Companies that they have been shut out of the process has no merit whatsoever. Lobbying by the Companies to change the way results are treated or “craft language” to paint the programs in a more favorable light is the opposite of independent analysis, and it needs to be stopped in order to ensure that Connecticut’s C&LM programs are evaluated credibly. It is also clear that responsibility for oversight of independent evaluations cannot be delegated fully to the EEB Evaluation Committee, which consists of volunteer board members. Rather, OCC suggests that the DPUC (with assistance from OCC as the ratepayer advocate) take a more active role in monitoring the evaluation process as further set forth below.

iii. Data Management Needs Significant Improvement

Another EM&V area in need of improvement is data management, which includes both the collection and maintenance of data by the Companies and the provision of data to the Evaluation Contractors. To illustrate data collection problems, OCC refers to this lengthy, but illuminating, portion of the Evaluation Consultant's response to OCC-23 concerning the HES evaluation:

The RFP was initially developed and provided to the Companies on October 2, 2008. During the review process over the next month and a half, the Company staff and Evaluation Consultant determined that the Bidders needed to see measure installation data for the PY to be examined (2008). Program Administrators had a great deal of difficulty providing data to cover the basic program parameters of Numbers or Participants (grouped by heating type), total numbers of measures (by general type, such as lighting, appliances, infiltration) provided, numbers of customers who received each type of measure and PSD estimates of savings from those measure groups. By mid-January, it appeared that these data would not be able to be incorporated into the RFP. Data were not stored in a way that made summarization simple to do. Over the next 2 weeks, the Evaluation Consultant received the raw data from the EDCs and developed rough summaries. These summaries resulted in two tables in the RFP since data were not maintained in a way that allowed data to be grouped in equivalent fashions. The RFP went out to bidders on January 27, 2009.

After the May 12th kick-off meeting, details of each participant's program services were to be provided to the evaluation Contractor by early June in order to allow the Contractor to develop a sampling frame that could be used to develop a detailed workplan. However, the Companies were not able to provide that data until July 31. The Contractor developed a less detailed workplan, submitted without access to the Company data, on July 10. The Companies provided their program data on July 31 and these data were incorporated into the Final workplan approved on August 7.

After the study was underway, acquisition of billing data became the bottleneck. Billing data were provided a piece at a time, as the IT departments at each utility were able to develop them. The final portion of the billing data was delivered on April 12, 2010. This represented a five-month delay for 2007 billing data and a two-month

delay for 2009 billing data. In addition to the delays receiving the billing data, the data received were in non-uniform formats, in large part due to CL&P's changes in data base structure over the 2007 to 2009 timeframe. The non-uniform data format (varying reading dates, months with multiple readings, months missing readings) required Nexant to assemble each bill manually for over 800 accounts.

Data concerning heating type and heating utility account numbers were frequently unavailable. Gas Company billing data were generally available for Yankee Gas and were affected by the same issues as experienced for CL&P. Southern Connecticut Gas and Connecticut Natural Gas were never able to provide billing data since there is no tie has been developed between electric company and gas company account numbers.

(OCC-23.)

Thus, data collection for the HES evaluation began in May of 2009 and was not completed until April of 2010. Many dozens of emails provided in response to OCC-7 (LFE-7) were dedicated to the subject. However, no data was ever collected from CNG or SCG despite the Evaluation Contractor's efforts. (Tr. at 180.) Thus, infiltration measures in gas heated homes (blower door test and caulking/sealing), a primary component of claimed HES savings, were not studied for CNG and SCG customers. (Tr. at 180.) Moreover, Phase Two measures, such as air conditioners, appliance replacements and insulation, were not specifically studied for any heat type because "the contractor was unable to recruit more than a couple of people who had those measures installed."⁵ (Tr. at 167-68; see also LFE-7 generally.)

⁵ According to the Evaluation Consultant, "for each of these measures, it's a very small number of customers receiving them relative to the overall number in the program." Tr. at 169. These are the types of measures listed in the EEB's Late-Filed Exhibit 10 as providing customer bill savings that "Far Outweigh Monthly C&LM Charges". LFE-10, title.

Moreover, testimony reveals that most HES program vendors who conduct energy audits and implement infiltration measures are collecting important pre- and post- data at the homes they visit on paper, not in electronic format. (Tr. at 188.) At a time when smart phones and iPads have reached the mass market, it is unclear why program vendors have not been required to collect data in a standardized, easily stored, easily sorted electronic manner for purposes of QA/QC and EM&V.

iv. The Companies Have Far Too Much Discretion Regarding Evaluation Results and Recommendations

Currently, there is no process in place to ensure that evaluation results and recommendations are appropriately incorporated into the Program Savings Documentation (“PSD”) and/or otherwise implemented. While a draft of the PSD is reviewed by the EEB Technical Consultants, the Companies identify changes to be made to the PSD, and incorporate evaluation results at their ultimate discretion. (OCC- 25.) The Companies are also free to disregard the recommendations of Evaluation Contractors regarding data collection practices that would improve the efficiency and accuracy of future evaluations, since the EEB does not have authority over the “development, content or accessibility” of the Companies’ data tracking systems. (OCC-24.)

For example, with respect to the Low Income Program Evaluation, after the lobbying effort described above was made, the independent evaluator concluded that existing realization ratios could be maintained only if the realized life of bulbs were reduced to reflect the findings that a lower persistence level must be reflected in the PSD since over 40% of CFL bulbs were gone one to two years

after installation (Final Report, Evaluation of the Weatherization Residential Assistance Partnership (WRAP) and Helps Programs, at 7-1 and 8--2). However, since the EDCs can decide what goes into the PSD (Tr. att 200), in this case the EDCs did not follow this recommendation. (Tr. at 197-199.)

The Department has ordered the Companies to provide information in the PSD to explain any changes since the last PSD as part of the annual filing requirements. The information provided by the Companies does not make it possible to determine the inputs that any changes are based upon. (PSD at 213.)

The Evaluation Consultant and the Evaluation Contractor who conducts any given study are well positioned to provide input into best practices for data tracking going forward, to ensure that future evaluations on the same program are more efficient. As the EEB has said, it does not have the authority to order the Companies to collect and provide data in a more efficient and usable manner, nor does it have a mechanism to ensure evaluation results are appropriately recorded in the PSD. (OCC-25.) Thus, it falls to the Department to provide a check that evaluation results and recommendations, including data management practices, are being implemented appropriately by the Companies.

In sum, it is clear that there are still areas which need to be improved to ensure that future evaluations are conducted as independently and efficiently as possible, and that the results of evaluations are incorporated into the PSD and future planning as appropriate, under a more formalized and transparent process. When queried on this issue in hearings UI seemed to agree. As testified by Pat McDonnell, Director of Conservation and Load Management at United Illuminating

“personally I'm not happy with the way this process is conducted. I'd like to see something much more formal. But I've told Ms. Oswald this, I think it would be better if there's some dialogue between evaluation staff and her and the evaluators, that might be fine, but as an ECMB member, I'd like to see here is the final draft report, and you have "X" number of days to comment and we comment in writing on the report. That would be a much better process than this.

(Tr. at 264.)

v. Less Company Interaction and Better Data Collection Practices Should Increase the Efficiency of the Evaluation Process

According to the latest invoices, the HES Evaluation has cost ratepayers almost \$200,000. (LFE-13.) The Kick-off Meeting for the HES evaluation was held in May of 2009, yet the evaluation has yet to be finalized. Data collection was delayed for months, in part because it took UI 5 months to execute a contract with the Evaluation Contractors, as demonstrated through numerous emails on the subject provided by the Evaluation Consultant. (LFE-12.) Other data collection issues described above exacerbated the delay. (OCC-23.) Moreover, although the first HES draft was sent to the Evaluation Consultant in July, 2010, the revision process is still underway more than four months later, with significant input from the Companies during this time period. (OCC-7.)

Similarly, the Limited Income Evaluation began in 2009 and the first draft of the Evaluation Report was issued on April 30, 2010 (Tr. at 254), a Final Report issued on July 27, 2010 and another Final Report issued on September 9, 1010. In between both the draft and the two Final Reports, OCC-14 contains some of the e-mail correspondence detailing the lobbying effort performed by the Companies as discussed supra.

OCC submits that, aside from obvious concerns about a lack of independence of the evaluation process, there are currently “too many cooks in the kitchen” for the process to operate efficiently. The process OCC suggests below will eliminate unnecessary and inappropriate Company involvement in the evaluation process, while also leading to better data management practices, and, ultimately, more public confidence in outcomes.

vi. OCC’s Recommended Process

In HREG -5, filed with its testimony in this docket and appended hereto as Exhibit C, OCC set forth a new recommended Evaluation Roadmap. HREG-5 illustrates an overview of OCC’s recommended flow of information and comments at various stages of the evaluation process. However, it does not contain all of OCC’s recommendations regarding the evaluation process, set forth more specifically as follows:

- The Companies should have input into the development of the RFP and the work order for any evaluation.
- The Companies should have input into the Evaluation Contractor selection process so long as all input is sent to the Evaluation Consultant in writing and comments are made available to OCC or the Department upon request and the ultimate decision rests with the Evaluation Consultant and Committee.
- Once an evaluation is underway, input from the Companies should be limited to responding to the Evaluation Consultant’s requests for data for the evaluation. The Companies should not be permitted to

contact the Evaluation Contractors directly except to respond to requests for data, in which case the Evaluation Consultant should always be copied on such responses. In order to prevent off-the-record conversations, there should be no meetings or phone discussions with the Companies after the kick-off meeting.

- The Companies should not be permitted to review or revise drafts of evaluations. Rather, the Evaluation Consultant should file as a compliance filing in the most recent C&LM docket a Final Report of each program evaluation. Such report should be served on all members of the docket's service list.
- The Companies should have the right to file exceptions to the Final Report within 3 weeks of the filing of the Final Report.
- Within 30 days of the filing of a Final Report with the Department, OCC, the Companies, or the ECMB (or the Department on its own initiative) should have the right to request a transcribed technical meeting to discuss the results of the evaluation and how they should be incorporated into the PSD.
- Any technical meeting should include a discussion of "lessons learned" regarding the data collection efforts for that evaluation.
- Appearance at such a technical meeting to answer questions should be a requirement for any Evaluation Contractor under the RFP for evaluations going forward. As a result of any such technical meeting, the Department should issue orders regarding the integration of

evaluation results into the PSD and data collection practices going forward. OCC suggests that the first such technical meeting should be held at such time as the HES evaluation becomes final, to ensure that the data collection problems that were encountered are remedied before the next evaluation.

While this recommended roadmap contains several steps, this process should actually streamline the evaluation process. Rather than having drafts of the evaluation circulate for months off the record while the Evaluation Consultant tries to reach a consensus, the relevant parties can have their concerns heard on the record (as they should be) and addressed in a more expeditious manner.

Finally, as set forth earlier in this brief, if either of the Companies has been found to have either delayed the evaluation process unduly or attempted to influence it off the record, it should have a punitive affect to their incentive payments.

(C) Administration and Reporting

C&LM Programs are supported each year on a first come first served basis until funding is exhausted. At that point, either money is transferred from other programs or the program is shut down. For example, as reported by Connecticut Public Broadcasting Network, in 2008, rebate programs had to be shut down in the summer due to a lack of funding, requiring about 600 businesses to halt energy efficiency upgrades, many of which were underway. This year, Connecticut had money available for residential rebates as part of the federally funded State Energy Efficient Appliance Rebate Program, but the program closed to new

applications on July 15. In other words, rebate applications for appliances purchased after July 15, 2010 would not be accepted for review and would not be processed. (HREG PFT at 36 - 37)

Having programs stop mid-year is confusing to customers and difficult for vendors. The Companies should make every effort to prepare budgets that will allow for a continuous stream of payments that will last throughout the year, to avoid large scale program changes. (Id.)

OCC proposes that the DPUC direct the EDCs to modify and improve their approach to program processes and administration when funds are exhausted before year-end. Large C&I customers will be better served if their application for program participation were more certain, so that they can more effectively plan their facility improvements and cash flow requirements. One solution that has worked well elsewhere is for the EDCs to issue a Request for Proposals that announces that a sum of money is available for comprehensive energy efficiency programs and describes the requirements that programs must meet to be considered. Projects can then be funded based on cost per kWh, KW, and/or Therm savings, as appropriate. With proper planning, this approach allows the C&LM budget to be managed, ensures that only the most cost effective programs receive funding, and by committing the funds to the successful RFP bidders, reduces the possibility that projects will need to be halted before they are completed due to lack of funding or a later diversion for other purposes. (Id. at 37.)

The EDCs objected to OCC's recommendation, and they refer to previous experience that led them to discard a RFP approach. (Tr at 618.) Their concerns with previous efforts were not well-documented on the record, but did speak of a concern that projects proposed would favor "low hanging fruit" at the expense of more comprehensive projects. This can be addressed by spelling out in the RFP the requirements projects must meet to achieve funding, so that proposals can be evaluated against each other with only the most cost-effective proposals that meet pre-established criteria receiving funding .

The RFP proposal is one suggestion for how to better manage and commit the C&I budget. In any case, it is imperative that a solution be found that mitigates the confusion and turmoil that results when funds are exhausted before year-end. If this solution is found unworkable by the Department, OCC requests that the DPUC direct the EDCs to collaborate among themselves and propose solutions to improve budgeting for the energy efficiency portfolio as a compliance filing.

OCC requests that the DPUC require the EDCs to modify and improve their budget and results reporting so that progress toward energy efficiency and demand reduction goals is more visible. By developing a planning and reporting structure that focuses on results and progress toward an overarching long-term goal, stakeholders will better understand how the State's demand reduction goals are linked to the C&LM planning and implementation results.

OCC testimony identified several specific improvements to C&LM reporting that should be undertaken. Progress toward achievement of annual gas reduction targets should be shown, along with progress toward achievement of annual goals

by sector and for the portfolio as a whole, including both electric and gas measures. A summary page that compiles all of this information would help decision makers track progress toward achievement of annual goals and highlight instances where spending and progress toward goals is occurring either more quickly or slowly than anticipated so that they can take necessary actions to use the C&LM budget as effectively as possible. We recommend that tracking progress toward achievement of annual electric and gas targets should be a basic tenet of all energy efficiency reporting (HREG PFT at 38 – 39.), and that the Department should provide a format for such tracking in keeping with the above.

(D) The Gas Program

OCC continues to believe that gas measures should receive additional focus, comparable to that provided for electric energy efficiency measures. This includes developing long term and annual gas savings targets as well as providing incentives for achievement of those targets. This will help put gas measures on a level playing field with electric measures.

OCC found that the C&LM Plan does not fully integrate gas measures into energy efficiency programs. The PSD, which the utilities have referred to as “the Bible” for energy efficiency program measures (Tr. at 277-78), does not include a number of gas energy efficiency measures that are commonly found in other successful programs. (HREG PFT, p. 34) The Consortium for Energy Efficiency, in its paper The State of the Efficiency Program Industry: Budgets, Expenditures, and Impacts 2009, listed the most commonly used energy efficiency measures in North American gas efficiency programs. Of those measures that are included in

50% or more of energy efficiency portfolios, only three of seven are included in the PSD.

<u>Efficiency Measure</u>	<u>% of Programs Containing It</u>	<u>In Ct.</u>
<u>Programs?</u>		
Res: Furnaces	86%	No
Res: Boilers	71%	No
C&I: Boilers	64%	Yes
Res: Storage Water Heaters	64%	Yes
C&I: Furnaces	55%	No
C&I: Storage Water Heaters	55%	No
Res: Tankless Water Heaters	51%	Yes

In addition, the PSD fails to include a number of commercial and industrial gas energy efficiency measures that have been found to be cost effective in a northeastern climate including: high efficiency gas furnaces, building shell improvements, low-flow pre-rinse spray valve, stack heat exchanger, air-to-air heat recovery, desiccant dehumidification, direct-fired make-up air system, duct sealing, and process-heating measures.

In terms of residential gas energy efficiency measures, the companies should consider providing rebates for the retail purchase of attic insulation. This can help replace incentives for do-it-yourself installation of insulation which has

been part of the federal tax credits for energy efficiency which will be expiring on December 31, 2010 (HREG PFT at 36).

In response to the OCC statement that gas programs in Connecticut cost \$0.55 per therm saved (HREG PFT at 34), during the hearings held on November 22, 2010, CL&P witness Swift of CL&P, stated that he calculated the values to be about \$0.37 cents per therm. (Tr. at 615.) Even if, for the sake of argument, the cost per therm saved figure cited by Mr. Swift of \$0.37 per therm were correct, the cost per therm saved would still be higher than all states in the ACEEE study with the exception of New Jersey. OCC continues to believe that Connecticut can do a better job of integrating more gas measures into its programs in a cost effective manner.

(E) Filing Schedule and Future Direction of the Program

OCC identified two important issues having to do with the timing of future filings and potential effects of cuts in the overall budget. Currently, the CL&M plans are filed on October 1, with the intent of having the Commission act on them by the end of the year. This leaves a theoretical 90 days for review of the plan, while the actual time period is often shorter due to administrative requirements and required lead times. OCC witnesses recommended that the CL&M schedule be modified so that filings are made no later than August 1 each year. (HREG PFT at 6 and 39.).

Company Witnesses Araujo, Swift, and McDonnell argue on behalf of CL&P, Yankee Gas, and UI, that an August 1 date would worsen existing problems because:

- There would be no current experience with new programs launched at the beginning of the year, as opposed to the 3, 4 or 5 months of experience they now have;
- The avoided cost study, which is filed every other year, is typically done during the summer;
- The ECMB public process would need to happen in April, as opposed to June, as it was this year;
- Program do no change a lot from year to year, so there is little to be gained; and
- There is a continuous process throughout the year, so there are many opportunities for information throughout the year. (TR 622:12 - 625:17)

Setting aside the obvious contradiction -- that on the one hand, things don't change much, but on the other hand, the Companies need the 3 - 5 months experience with new programs -- OCC agrees that other activities that feed into the process may need to happen earlier than they do under the current schedule.

To put the CL&M process in perspective, the CL&M plan this year will address the spending plan for approximately \$123 million. (Tables A1 of 2011 C&LM Plan.) As a frame of reference, the recent rate cases filed by CNG and UI requested \$16.4 million and \$32.6 million, respectively. (Docket Nos. 08-12-06 and 08-07-04.) In contrast, those proceedings had 180 day schedules, as required by statute.

For its part, OCC was constrained by the CL&M review schedule and was unable to perform the investigation to the breadth and depth that it believed is

required here due to the tight schedule. For instance as noted earlier, a more thorough review of the EM&V process and how the results do/do not get reflected into the PSD must be performed. OCC does find something closer to the 180 day rate case schedule to be a reasonable balancing of the needs of the utility to operate the business, and the needs of the Department and other parties to examine the issues.

OCC agrees that it will take a onetime adjustment to the schedules to accommodate an earlier filing date. However, since the Plan is based upon annual performance and annual filing date, the current year's activities may inform the filing in that year but are nowhere near complete or conclusive. OCC believes the benefit to be gained by allowing adequate time to examine the filing far outweighs any incremental knowledge that might be gained during the three months between proposed and currently required filing dates.

IV. CONCLUSION

OCC appreciates the Department's consideration of the issues presented herein and respectfully requests that the Department make findings consistent with OCC's analysis and recommendations as set forth herein.

Respectfully submitted,

MARY J. HEALEY
CONSUMER COUNSEL

By: _____
Victoria P. Hackett
Staff Attorney

I hereby certify that a copy of the foregoing has been mailed or hand-delivered to all known parties and intervenors of record this 6th day of December, 2010.

Victoria P. Hackett
Commissioner of the Superior Court