The United Illuminating Company

157 Church Street P.O. Box 1564 New Haven, CT 06506-0901 203.499.2000



August 14, 2012

Tim Cole Executive Secretary / Energy Efficiency Board West Wind Consulting 157 Whitney Street, 2nd Floor Hartford, CT 06105

Re: Docket No. 10-10-03- <u>DPUC Review of The Connecticut Energy Efficiency Fund's Conservation and Load Management Plan for 2011</u> – UI Comments on the "Impact Evaluation of the Retrocommissioning, Operations & Maintenance, and Business Sustainability Challenge Programs, Draft Report. Michaels Energy and Evergreen Economics, August 2012

Dear Mr. Cole:

In compliance with the Department of Public Utility Control's (the "Department") directive on page 42 of its January 6, 2011 Decision in the above referenced docket (the "Decision"), The United Illuminating Company ("UI") hereby submit the following comments on the Impact Evaluation of the Retro commissioning, Operations & Maintenance, and Business Sustainability Challenge Programs Draft Report.

On page 42 of its Decision, the Department stated in reference to all future program evaluations, "The EDCs/Energy Efficiency Board will no longer be permitted to comment on internal draft evaluation reports. When the Evaluation group is ready, they should release a draft report. At that time, the EDCs and the Energy Efficiency Board may make public written comments. The Evaluation group will then make modifications at their discretion then issue a final report or another draft report".

UI Comments on **Retro-Commissioning (RCx) Program** are as follows:

- None of the projects evaluated for RCx were UI projects. UI's RCx program is currently in its infancy. As such, the recommendations seem reasonable and we will take them into consideration for the 2012 RCx program and future planning as we begin to qualify new vendors to support the program. It should be noted, however, that the recommendations seemed to be broad and general. It would have been more meaningful to include in the description of each recommendation more specific quantification. For example, instead of stating "several of the school projects...", quantify it specifically as "X out of Y school projects...", etc.
- Page 7 3.3 Evaluation Methodology Can the vendor explain in detail the process of how they
 determined that the site representative interviewed for each site was the appropriate person to
 answer questions about pre and post operating conditions.
- Page 17, 3rd paragraph It appears that in several cases, projects that were sampled for the RCx section of the study had measures that are no longer functioning or not functioning as designed.
 In the cases where the item is no longer functioning, this loss of savings is typically accounted for

in the persistence of a measure and not in operations adjustments. If a measure is installed correctly and the business goes out of business, this loss of savings is typically accounted for in measure persistence. An operational adjustment in these cases will cause a double dipping effect since this loss is already accounted for in measure persistence. Measure persistence takes into account business turnover, early retirement of installed equipment and other reasons that the measure might be removed or discontinued from the documented schedule.

- Page 19, 4th paragraph It is stated that the hours of operation were adjusted due to a change in building ownership and building use and occupancy. It can be debated that since the facility changed ownership and building use that this type of occurrence should be accounted for in the measure persistence issue and not an operations adjustment. If the facility did not go out of business, did not change ownership and the operation hours were different than reported, then it would be a clear case for an operations adjustment.
- Recommendation #1: UI feels that this vendor recommendation is reasonable and valid for future program enhancements and UI will consider this recommendation for future program improvements and changes as we begin to qualify new vendors to support the program.
- Recommendation #2: UI feels that this vendor recommendation is reasonable and valid for future program enhancements and UI will consider this recommendation for future program improvements and changes as we begin to qualify new vendors to support the program
- Recommendation #3: UI feels that this vendor recommendation is reasonable and valid for future program enhancements and UI will consider this recommendation for future program improvements and changes as we begin to qualify new vendors to support the program
- Recommendation #4: UI feels that this vendor recommendation is reasonable and valid for future program enhancements and UI will consider this recommendation for future program improvements and changes as we begin to qualify new vendors to support the program

UI Comments on Operations & Maintainance (O&M) Services are as follows:

- Page 25, 3rd Paragraph Can the vendor provide more a detailed explanation of the evaluation methodology and audit adjustments for air compressor measures. Please elaborate on the methodology and approach within your analysis of projects involving the fixing of compressed air leaks. In particular, please explain how your approach does or does not take into account the existence of new leaks that may have formed since the project was completed. (See project Akiu)
- Has the vendor accounted for possible changes in production that may have impacted the persistence of measure savings? In particular please see site report for Project B1uK. In the summary of calculations it is noted that the vacuum pumps were running significantly more in the post condition. It appears that this change may be due to a change in the business environment that caused an increase in production since the project was completed. Please supply the dates when the site visit was conducted. If the traps weren't maintained between the time of installation and the time of the site visit then the pumps would experience longer run times. Please confirm the timing and that the traps were functioning properly. These analyses would be more thorough if the site interview addressed general business changes that may have impacted these systems and potential savings.

- Regarding project AmGo, the site report indicates that an interview with the manager suggested that the operations in the facility had not changed significantly since the project was completed in 2009. It should be noted that we believe this project was an off-shoot or linked project from one of the BSC projects/customers that was evaluated (BSC Customer G). In the related BSC case study of this customer, it was noted on p. 51 that they have had "reductions in the number of work shifts from three down to two". We also know that during the time since the project was completed the customer also sold off or moved several pieces of production equipment to another site, thereby changing the operations at the site. Unfortunately, this is not noted in documentation for either of the projects. These factors combined may have contributed to the low realization rate and the fact that the air handling units from project AmGo seemed to be oversized. They may not have been oversized based on work shifts/building use and equipment use during the time of the project.
- Page 27, Table 27 There is an adjustment made for a project site that has since closed, based on the noted title of "Closed Site". When a business goes out of business, this is not typically accounted for in the standard impact adjustments made within an impact evaluation. This occurrence or situation is accounted for in the measure persistence factor. Measure persistence (not savings persistence) takes into account business turnover, early retirement of installed equipment and other reasons that the measure might be removed or discontinued from the documented schedule.
- Page 34, last paragraph The savings for this site were zeroed out due to the fact that the
 software that controlled computer usage and obtained the savings was erased and never
 reinstalled after the computers were reimaged at the end of the school year. This is another
 example of an adjustment that is typically accounted for in measure persistence (measure life =
 equipment life + measure persistence).
- For many of the cases cited above where the vendor is looking to make adjustments due to
 business turnover or other reasons where measures might be removed or discontinues, UI see
 this as a measure persistence adjustment. UI sees these vendors adjustments as a non-standard
 practice and now imparts double dipping and accounting for this loss in two different areas
- Page 34, 1st Paragraph In this paragraph the vendor states a total of 55 PC control projects. On page 35, 6th paragraph, the vendor states 27 projects were for PC controls. Can the vendor clarify the differences in quantities?
- Recommendation #5: In general UI will factor the O&M recommendations into future program design.
- Recommendation #6: In general UI will factor the O&M recommendations into future program design.
- Recommendation #7: In general UI will factor the O&M recommendations into future program
 design. However, it should be noted that the program design for O&M Services was not intended
 to provide incentives for on-going preventative maintenance. Rather, the intention was to provide
 incentive for first time "fixes" with the hope of "jump-starting" a customer's maintenance program
 such that the customer would begin to enact behavioral changes and continue these O&M

corrections on their own. If this is not, indeed, happening, then we should consider how we address both training and persistence as part of the program, or we should reconsider the suggestions to provide continued incentives for preventative maintenance.

 Recommendation #8: In general UI will factor the O&M recommendations into future program design.

UI Comments on Business Sustainability Challenge (BSC) Pilot are as follows:

- From a high level, UI feels that the case study approach to evaluating the BSC is appropriate and the vendor has done a good job in summarizing the non-quantitative impacts and values to each of the 9 BSC participants.
- Recommendation #9: We recognize the value in staffing energy and sustainability programs on an on-going basis either through paid full-time (or part time) positions, or through volunteer teams. The UI/Track A BSC program strongly encourages customers to develop an energy/sustainability team and identify a champion. We have no control over the commitment of resources by the organization/customer to the team/individuals on an on-going basis.
- Recommendation #10: UI/Track A does work with customers on a one-on one basis and we have
 encountered similar observations regarding the difficulty in getting customers to develop
 meaningful metrics –energy or otherwise. In particular it is very difficult to encourage customers to
 designate and track metrics that are not absolute. We will continue to explore ways to further
 train or work with customers in this area.
- Recommendation #11: UI/Track A is already beginning to factor this recommendation into the 2012 and future program planning.
- Recommendation #12: UI/Track A is already beginning to factor this recommendation into the 2012 and future program planning. In fact, UI/Track A hosted two meetings for BSC participants to share ideas, best practices and challenges in 2012.

If you have any questions regarding the above comments, please contact me at (203) 499-3686.

Very truly yours,

Paul M. Gray, CEM Senior Business Development Professional The United Illuminating Company 180 Marsh Hill Rd Orange, CT 06477