



February 8, 2018

Lisa A. Skumatz, Ph.D.
Skumatz Economic Research Associates (SERA)
762 Eldorado Drive
Superior, CO 80027

RE: C1630 Largest Savers Evaluation Draft Report

Dear Dr. Skumatz,

Eversource Energy (“Eversource”) is pleased to submit these written comments regarding the draft evaluation report: *C1630 Largest Savers Evaluation Report, Review Draft* (“Draft Report”), submitted January 12, 2018 by Nexant, Inc. (“Evaluator”). Eversource received the Draft Report on January 25, 2018 with a request to provide comments by February 8, 2018. Per the Energy Efficiency Board Evaluation Road Map Process, these comments are for consideration for inclusion in the Final Report.

This study evaluated projects with the most energy savings in the CT C&I Energy Conscious Blueprint (ECB) and Energy Opportunities (EO) for program years 2013 through 2015, and included the following two objectives: (1) evaluate the energy and peak demand savings impacts for a census of the largest projects supported by the Energize CT initiative; (2) provide stakeholders with findings that are relevant and useful to potentially reducing future evaluation costs. The study used the avoided cost of energy to quantify impacts of electric and gas measures, and selected the top 35 projects in terms of avoided cost impact over the program period under study. The evaluators provided on site measurement and verification for 34 of the 35 sites and developed realization rates for the projects.

Comments on Findings and Recommendations

Eversource appreciates the Evaluator’s efforts to identify opportunities for improvements in program implementation and savings calculations. Eversource believes this study provided valuable third-party insight and recommendations that will help enhance our programs. The report results, including the project-specific findings and site reports, will help us improve the consistency and accuracy of our savings calculations.

In addition, we strongly agree with the recommendation that EO and ECB program evaluators—who are currently in the planning stage of impact evaluations of the two programs—consider using the findings and underlying site-specific results of this study to augment and inform their evaluation efforts, with a goal of reducing sample sizes and study costs.

We offer the following additional comments on the Draft Report findings and recommendations:

- **Use peak demand savings definition with a standard time/day window.** Eversource acknowledges that a peak definition based on a standard time and day would simplify demand savings calculations and tracking. However, our decision to use the seasonal peak hours definition was based on analysis that found the definition to have a stronger correlation with temperature and with actual system peak. Changing definitions would involve costly changes to our tracking system and our processes for calculating savings and bidding them into the ISO-NE Forward Capacity Market. Eversource will examine this issue more closely to determine if the costs of these changes outweigh the benefits associated with more simplified and consistent savings estimates.
- **Take steps pre- and post-installation to reduce variance between ex ante and ex post savings.** Eversource recently created a process with dedicated staff for reviewing savings estimates for large projects, and hired an outside firm to perform QA/QC on large projects. In addition, Eversource is pursuing an M&V 2.0 pilot project, which offers the potential for close to real-time feedback on project savings being achieved, which will allow for adjustments to savings calculations during and after project implementation. Additional steps such as pre-installation metering on retrofit measures, commissioning on new construction measures, and post-installation surveys might add significant cost to projects that may put at risk their project cost-effectiveness. In addition, savings for several projects were impacted by occupancy changes at project sites, such as buildings where leases were not renewed. Such factors are effected by broader economic trends that are difficult to predict and are not within Eversource control. Nevertheless, Eversource will consider pre-installation and post-installation steps for certain large projects with savings above a pre-determined threshold.
- **CT EEB direction on savings from fuel switching.** As detailed in the PSD, the companies currently claim lost opportunity savings only for fuel switching measures, and do not pay incentives tied to fuel switching. We will change these policies upon further guidance or direction from DEEP and EEB.
- **Develop measure savings workbooks for common and/or prescriptive measures, to automate the PSD for select measures.** Eversource has standardized workbooks that utilize PSD assumptions and calculations for common measures such as lighting. In some cases, such as for custom projects with complex measures, we will conduct more sophisticated savings analyses in lieu of using the standard workbooks.
 - **Application of the PSD.** Eversource consistently applies the PSD, but for complex and comprehensive custom projects, may use project-specific custom measure approaches outlined in the PSD.¹ This can include a range of assumptions and methodologies, such as computer simulations using approved software and modeling requirements. For example, for such projects Eversource often utilizes DOE-2—a widely used and accepted building energy analysis

¹ See *CT Program Savings Document, 12th edition for 2017 program year, section 3.3.1.*

program developed in collaboration with Lawrence Berkeley National Laboratory with funding from the U.S. Department of Energy.

- **Interactive savings effects.** The Draft Report notes in several places that ex ante savings typically did not account for the interactive gas heating effects resulting from lighting savings in conditioned spaces, and that this resulted in a negative realization rate for lighting measures' gas savings. Connecticut primarily uses the Utility Cost Test (UCT) for cost effectiveness, which does not include gas interactive effects for electric measures. We will examine the feasibility of tracking and reporting these interactive effects as part of the development of our new tracking system. We also request that the draft report be revised to include realization rates and coefficients of variation that reflect the UCT approach.
- **Improve processes for storing and maintaining project documents.** Eversource agrees with the recommendation to consistently store and maintain documents, and has taken recent steps that will help address this, including formalizing a process for engineering staff to document their reviews of measures and store associated files. In addition, several recommendations in the report relate to apparent inconsistencies in the utility tracking databases. Eversource is currently developing and beginning to implement a new tracking system that will have enhanced ability to track, organize and store project information. Eversource also agrees with the recommendation to compile and retain files provided to evaluators, and we currently store files provided to evaluators in a central shared folder for future reference.

Eversource appreciates the opportunity to provide comments. Please contact me with any questions you may have.

Sincerely,

Joseph Swift

Joseph Swift
Operations Supervisor, Eversource
Joseph.Swift@Eversource.com
860-665-5692