



July 16, 2020

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

**RE: C1635 EO Impact Evaluation Draft Report**

Dear Dr. Skumatz,

Eversource Energy (“Eversource”) is pleased to submit these written comments regarding the draft evaluation report: *C1635 Impact Evaluation of PY 2016 & 2017 Energy Opportunities (EO) Program* (“Draft Report”), submitted June 30, 2020 by DNV-GL (“Evaluator”). Eversource received the Draft Report on July 2, 2020 with a request to provide comments by July 16, 2020. Per the Energy Efficiency Board Evaluation Road Map Process, these comments are for consideration for inclusion in the Final Report.

The Draft Report examined the extent to which EO program performance is meeting goals and objectives, and to recommend revisions to the CT Program Savings Document (PSD) to improve claimed savings estimates moving forward. The objectives were to (1) determine evaluated energy and seasonal peak demand savings and retrospective and prospective realization rates (RRs) by end use, (2) evaluate the 2018 Upstream lighting program and update PSD assumptions accordingly, and (3) update the PSD for lighting hours of use and seasonal peak coincidence factors. On-site visits, including measurement and verification (M&V) were performed at a statistically selected sample of 88 Upstream lighting, 65 EO lighting, 26 electric HVAC, 26 electric other sites, 20 gas HVAC/DHW sites, and 12 gas “other” sites.

General Comments on Draft Report Findings

Eversource appreciates the evaluator’s efforts to conduct a comprehensive, thorough impact evaluation of the Companies’ flagship C&I retrofit program, and we are pleased with the study’s main finding that the EO Program, including the Upstream Lighting Program, is tracking most impacts reasonably well. In particular, we note that the comparison of similar studies in section 5.6 shows that EO lighting and HVAC projects—which are the largest contributors to the program’s electric savings—had realization rates that are the closest to 100% of any of the other studies reviewed.

In addition, we appreciate the evaluator’s careful analysis of both retrospective and prospective realization rates, which provide the Companies with results that reflect up-to-date program assumptions and can be appropriately applied to the latest iteration of the PSD.

Comments on Recommendations

Eversource generally agrees with the Draft Report’s recommendations, as follows.

**Update the PSD with evaluated electric and gas realization rates by end use.** Eversource agrees with this recommendation and will apply these realization rates in the 2021 PSD update.

**Revise the PSD to explicitly call for the use of site-specific hours of use assumptions when calculating EO lighting energy savings and the coincident factors recommended from the data leveraging analysis.** Eversource generally agrees with this recommendation, and it is generally in line with our current practices. However, in reviewing proposed projects, we plan to continue to use the PSD default hours as a check against potential overstatement of proposed hours by vendors—which can occur when paying kWh-based incentives. As is the current practice, if vendor proposed hours of use are significantly higher than PSD defaults, we require further support and may conduct a deeper review of the proposal to mitigate any potential overstated savings. In addition, we have strengthened the per-unit incentives we offer, which will shift some vendors away from proposals for kWh-based incentives.

**The PSD should use one of the two seasonal peak realization rates by end use, depending on whether new protocols are established to fully populate EO tracking estimates.** Eversource agrees with this recommendation and will use the prospective realization rates that assume full population of peak kW tracking estimates. Since the period of this study, we have begun routinely reviewing projects to ensure that kW values are populated in tracking data.

**The PSD upstream lighting savings calculations should be updated with using the in-service rates, delta watts, hours of use, and interactive effects from the study.** Eversource agrees with this recommendation for in-service rates, hours of use, and interactive effects. For delta watts, the Companies updated the 2020 PSD with a table of delta watts by lighting type, using new values and a longer list of lighting types that were not in place in the 2018 period of review.<sup>1</sup> We request that the final report provide specific direction on how to map the evaluated delta watt values to the values for different lighting types in our current PSD. In addition, for in-service rates, we request clarity on whether, and why, we should apply short-term or long-term in-service rates.

**The EEB should consider (1) a study of hours of use reduction due to lighting controls, and (2) to use the error ratios observed in this study to guide future studies of EO.**

Evaluation planning and scoping issues are ultimately decided by the EEB. However, Eversource generally agrees with these considerations, although would note that our experience in Massachusetts indicates that lighting controls evaluations are technically and methodologically challenging, and have sometimes failed to provide useful results.

Thank you for the opportunity to provide comments.

Sincerely,

*Miles Ingram*

---

<sup>1</sup> See CT's 2020 Program Savings Document, 16<sup>th</sup> Edition, filed on March 1, 2020, Table 2-J: Delta Watts. Accessible at [https://www.energizect.com/sites/default/files/2020%20PSD\\_Final\\_3.1.20%20Filing.pdf](https://www.energizect.com/sites/default/files/2020%20PSD_Final_3.1.20%20Filing.pdf).

Miles Ingram  
Sr. Analyst, Energy Efficiency, Eversource  
Miles.Ingram@Eversource.com  
860-665-2441