

Memorandum

To: Lisa Skumatz and Bob Wirtshafter, Connecticut Energy Efficiency Board Evaluation Consultants

CC: Craig Diamond, CT EEB Executive Secretary

From: Glenn Reed, CT EEB Residential Technical Consultant

Date: June 19, 2019

Re: Residential Technical Consultant comments on the 5/22/19 Review Draft for Project R1603 – CT Home Energy Solutions Impact Evaluation: Program Years 2015 and 2016

Provided below are summary and highlight comments on the May 22 review draft of the CT Home Energy Solutions Impact Evaluation: Program Years 2015 and 2016 study (R1603). These comments supplement those contained in the marked-up draft report that was also submitted. Most of the comments below are included in the marked-up draft and are provided here as a high-level summary and for emphasis.

1. The report is entirely silent on the treatment of customers using oil (and propane). While developing oil savings estimates may have been out of scope, the program description should note the large percentage of oil-heat program participants. Similarly, the fairly low proportion of electric-heat customers should be noted. Most electric program participants do not use electricity for space or water heating.
2. Can separate per home savings – and RRs? – be provided for electric heat vs. non-electric heat customers?
3. The Program Description needs to more fully highlight some of the differences between the HES and HES-IE programs. These are distinct programs. Given possible differences in home sizes, measure mix, etc. are there differences in per home usage and savings between HES and HES-IE participants?
4. While the focus on annual kWh and Ccf savings is appropriate, please also provide lifetime savings and total MMBtu savings in select tables. The utilities now have a

legislatively mandated MMBtu goal and including LT and MMBtu savings helps put the lower lighting savings into better perspective.

5. Please describe in more detail how measure savings were determined in the 2015 and 2016 program years for both programs. Deemed savings? Program tracking system algorithms? Excel workbook for HES? Other?
6. There is no discussion of interactive effects. In particular, the impact of reduced lighting on heating and cooling loads. I believe that in 2015 and 2016 the utilities were not including lighting interactive effects in their program tracking. This may explain, in part, lower evaluated envelope measure savings.
7. The low lighting RR requires some further discussion. At a minimum, some additional explanation of the differences in the 2011 and 2015/2016 per bulb savings values should be provided.
8. Several measures, e.g., duct sealing and electric insulation, had very low measure counts. Please verify these values. For electric envelope measures, were these counts only for electric-heated homes?