Memorandum

To: Lisa Skumatz, Connecticut Energy Efficiency Board Evaluation Consultant

CC: Emily Rice, CT EEB Executive Secretary

From: Glenn Reed, CT EEB Technical Consultant

Date: April xx, 2023

Re: Technical Consultant comments on the 3/13/23 Draft for Project R1983 – HES/HES-IE Impact and Process Evaluation

Provided below are summary and highlight comments on the March 13 review draft of the HES/HES-IE Impact and Process Evaluation study (R1983). These comments supplement those contained in the marked-up draft report that was also submitted. All the comments below are included in the marked-up draft and are provided here as a high-level summary and for emphasis.

The Technical Consultants understand the need to complete the impact component of this study in a timely manner to inform any PSD revisions for the 2024 C&LM Plan Update. However, we view the very large majority of our comments below and in the attached as addressing more process related issues tied to program design and implementation considerations. We ask that these matters be fully addressed in the final report, even if it requires work beyond the timeframe imposed by the PSD revision schedule.

1. As the final draft is prepared, the report’s authors should give careful consideration as to whether statements and findings apply to the full HES and HES-IE programs or are specific to just the single family components. The latter appears to be the case in most, but not all instances. Please make certain that such distinctions are made clear throughout the report and note clearly whether and when findings include multifamily program participants.
2. While there are a couple of call-out boxes noting how delivered fuel savings are determined in this study, please ensure that when any program-level savings are provided that it is clear whether the presented savings include delivered fuels.
	* Where is the discussion on how gas savings results are converted to oil and propane savings?
	* Also, when statistics are provided regarding savings vs. consumption by census block, how, if at all, are delivered fuel savings considered? They are not, correct? Does this limit the usefulness of the Customer Profile analyses?
3. All the savings presented are annual savings. Consider also providing lifetime savings as part of higher level portfolio and program level discussions. Lifetime savings better track the Companies’ primary Performance Management Incentive (PMI) benefits and net benefits metrics and better value longer-lived envelope and equipment measures.
4. The discussion in Section 1 of the HES and HES-IE Programs was fairly cursory and lacked some key program details including, but not limited to:
	* Recent and planned program changes and enhancements, e.g., the elimination of lighting, increased focus on advanced duct sealing, revisions to window incentives, etc., even if these changes weren’t in effect during the study period.
	* How HES-IE add-on measures are reviewed and approved. Are all such measures installed at no cost, including any potential landlord contributions?
	* Coordination with WAP (and LIHEAP?).
	* Budgets, budget breakouts, and whether budgets have been fully expended historically.
	* Measure incentive levels and actual unit numbers.
	* What are the average total program and measure incentive costs per participating home and how do these values compare to regional benchmarks.
	* Whether energy and demand savings goals have been met.
	* The programs’ QA/QC processes. This includes how the QA/QC processes operate, what the QA/QC inspections have found, and whether and how the Companies have responded to these findings. Is our QA/QC processes doing their intended job?
5. There was considerable discussion related to HES add-on measure recommendation, conversion, and installation rates, including benchmarking against other states in the region. However, there were no similar data presented for HES-IE measures. Does the program achieve 100% conversion rates in non-barriered homes for such measures? If not, how much of a shortfall is there and what are the causes of such shortfalls?
6. A number of credible reasons are provided as to why air sealing savings have declined over time. But do these reasons (fully?) apply to the reported tracking system savings which are based on site specific calculations, not deemed savings? While the report benchmarks CT’s air sealing efforts to MA’s and RI’s in terms of time spent air sealing, it does not look at actual ACH50 reductions. Please do so if possible. Are we achieving most of the available air sealing savings?
7. While there is significant discussion of the low air sealing RRs, there was only a very cursory discussion of duct sealing with no mention, beyond data in the tables, of its very low RRs (3-9%). There was no attempt to explain these no low RRs. Duct sealing was performed in 38% of HES participants. Additional discussion of this key measure is needed.
8. The very low air and duct sealing RRs potentially raise basic questions about CT’s unique program model. Should this model of delivering air and duct sealing as part of core services be continued?