ENERGY FUTURES GROUP

Memorandum

To: Lisa Skumatz, Connecticut Energy Efficiency Board Evaluation Consultant

CC: Craig Diamond, CT EEB Executive Secretary

From: Glenn Reed, CT EEB Residential Technical Consultant

Date: January 4, 2016

Re: Residential Technical Consultant Summary Comments on the 12/19/15 Eversource Behavioral Persistence Study Draft Report (R32)

Provided below are summary and highlight comments on the December 19 review draft of the Eversource Behavioral Persistence Study Draft Report. These comments supplement and reinforce those contained in the marked-up draft report that was also submitted. The comments below are largely included in the marked-up draft, but are provided here as a high level summary and for emphasis.

1. Most of the presented results are for the High Use Treatment Groups. The greater magnitude of per HH savings from this group vs. the Average Use Group contributes to the low $/kWh calculated in the draft report. Provide context to the relative number of High vs. Average Use customers currently being provided HERs by Eversource and the total number of HHs represented statewide in both Groups.
2. One of the recommendations is for Eversource to discontinue treatment of the High Use Group to take advantage of savings persistence. While this approach yields lower cost/kWh it does not yield the highest overall savings as savings degrade over time post treatment. This proposed approach is likely not consistent with Connecticut's legislative mandate to pursue all cost-effective energy efficiency.
3. Has the proposed stop/start approach to implementing a program design that leverages savings persistence been pursued anywhere else? Has OPower been asked their thoughts on such a program design; understanding that they may have a vested interest in maintaining an annual treatment model?
4. Consider using some term other than *cost effective* when referring to the $/kWh metric for saved energy. Consider *cost of saved energy (CSE)* as an alternative.

5. Try to provide a single summary table with the following for each Treatment Group and Overall:
    - Group N
    - % of total residential population the Group represents
    - Annual and monthly consumption
    - Savings with and w/o retention in Years 1-4 in kWh/day, kWh/year and as a % of annual consumption
    - Persistence factor in Years 2-4
    - Savings degradation in Year 2-4
    - Annual cost to provide HER
    - $/kWh for savings in Years 1-4 taking with and w/o savings persistence
6. How do the proposed PSD revisions compare to how the Companies modeled multi-year HER savings in their 2016-2018 C&LM Plan? The report would be significantly more useful if a comparison and critique were made as to how the Plan modeled multi-year savings for HERs given the report's findings. I believe that the Plan's persistence and measure life assumptions were informed largely by Allcott and Rogers (2014).
7. When examining deeper measure installations, how did the analysis address the observed lag between an HES assessment and recommended deeper measure installations? For insulation this lag can be as much as a year.