

Project Description – R84: Consumer Electronics Literature Review

May 12, 2014

Objective and Priority Outcomes:

The Energy Efficiency Board (EEB) has requested that NMR prepare a literature review of the consumer electronics market to identify the potential for a residential consumer electronics program in Connecticut. Through a literature review, NMR will achieve the following objectives:

- Identify current factors affecting the energy efficiency of residential consumer electronics products and related savings opportunities;
- Assess the current state of the consumer electronics market, in particular for the products that account for greater proportions of residential electricity use (e.g., televisions, set-top boxes, video game consoles, personal computers, and displays);
- Provide the EEB with recommendations on which products may make the strongest candidates for inclusion in a consumer electronics program and possibly suggest approaches for the design of a consumer electronics program in Connecticut; and
- Offer suggestions for a more detailed future consumer electronics potential study that will provide the EEB with greater detail on both program and energy savings potential from a possible consumer electronics program.

Work Summary:

The Connecticut Consumer Electronics Potential Study will update a consumer electronics potential study NMR completed in 2012 for the Massachusetts electric program administrators (PAs) (referred to as “NMR’s 2012 study” from here forward).¹ The team will provide a report that abbreviates NMR’s 2012 study and adds the new information gathered as part of the current Connecticut effort. For the Connecticut Consumer Electronics Potential Study, NMR will perform a limited literature review that will update its 2012 study. Given that the consumer electronics market is rapidly changing, we estimate that literature published since then may offer notably different findings than what was available in 2012.

NMR’s 2012 study focused on five products that represented the greatest source of potential savings from consumer electronics. At the time, the five products represented over three-quarters of the total national energy consumption of consumer electronics: televisions, set-top boxes, video game consoles, personal computers, and displays. One of the first tasks we will conduct for the current Connecticut study will involve determining if any quantitative research estimating the energy consumption and potential savings of individual consumer electronics products has been published since 2010. Based on the results, NMR may choose to conduct research on different product types if they represent greater potential savings than these five products. Alternatively, we could focus on a limited list of products of greatest interest to the EEB.

The report will convey the current factors affecting energy efficiency and potential savings opportunities, the state of the consumer electronics market, recommendations for the most promising products for a consumer electronics program in Connecticut, and possible future study designs to explore program and savings potential in more detail.

Schedule:

The identification of key issues will begin in June 2014, while the literature review will be administered in July and August, 2014. The draft report will be submitted in late August, while findings will be presented in September, 2014.

Budget (Time and materials pricing):

The budget for this task is estimated to be \$28,000 as originally budgeted for this study.

¹ For more information: *NMR Group, Inc. 2012. Massachusetts Consumer Electronics Potential Qualitative Research. Submitted to Massachusetts Program Administrators and Energy Efficiency Advisory Council Consultant.*