

VEIC Study Review Synthesis
Chapter Team 4 – Residential Energy Efficiency CORE Programs Review and Assessment
June 4, 2012

Summary of Chapter Intent

Chapter Four is focused on the residential CORE programs offered by the regulated electric and gas utilities that primarily target single family homes, and are designed to address market barriers that limit investment in energy efficiency improvements. It describes the characteristics of the programs that are working well in meeting policies and goals, and makes recommendations for enhancements. The Home Energy Assistance program which provides weatherization services for income qualified households, is addressed separately in Chapter Six. Chapter Four and associated recommendations are organized by market segment as follows:

- Existing homes
- Residential new construction
- Residential retail products
- Residential heating, ventilation and air conditioning (HVAC) equipment
- Educational programs

Chapter Team Findings

Recommendations for Early Action

The Chapter Team does not envision that the recommendations contained in the chapter require legislative action, as the recommendations are focused more on the details of program design and implementation than on policy. The team agrees that the parties to the Core filing dockets, (through either direct input at meetings or through participation on sub-groups) will have greater ability to address the details of recommended enhancements within the current regulatory structure than will the EESE Board. The Utilities are also currently reviewing the recommendations in the study as they begin their work on the 2013-2014 Core Program filing. Interested parties can formally participate in the PUC process. The team also notes that program administration is an active and ongoing process and some of the recommendations are already being discussed by the administrators. While some of the recommendations would require regulatory approval, others can be implemented directly by the program administrators. Further, certain aspects of the Home Performance with Energy Star (HPwES) program are currently under formal review at the Commission. Results of that process may have an effect on the program design, and its interaction with other programs, going forward. The Legislature is currently addressing possible reform to Regional Greenhouse Gas Initiative (RGGI) which, if approved, could direct additional funding to the Core Programs.

Areas for Further Consideration

As stated above, the chapter was primarily focused on program implementation details rather than policy issues. Although the EESE Board is not likely to focus on the programs at this level of detail, the Chapter Team does agree that it will be important for the EESE Board to encourage the parties to consider the recommendations as the programs for 2013-2014 are being developed. It is worthy to note that there are several EESE Board members who are also parties to the Core Program proceedings. The Chapter Teams review of the Chapter 4 recommendations is presented below, structured as in the chapter, by market segment and are intended for consideration and discussion by the parties to the Core Program proceedings.

Items Recommended to be Considered for Further Discussion During Core Proceedings

Existing Homes Programs

Primary recommendations centered on the incentive level offered, contractor relationships and evaluation of the Home Performance with Energy Star program. Specifically:

1. The team believes that the time is not ripe for further reduction of the maximum incentive. The program is still being operated as a pilot with limited participation so it is more appropriate to monitor the market's response to the current incentive structure (which was adjusted from 75% to 50% in 2011) and make adjustments as deemed appropriate. The program evaluation done by Cadmus and released in 2011 concluded that the reduction in the incentive was "appropriate" and that "The NH program appears to have arrived at a good compromise incentive structure by offering a 50% incentive."
2. The team also was in agreement that appliances and lighting should continue to be offered as part of the recommended measures in the HPwES program, instead of shifted to the retail products programs. While the study points out that this shift could extend the HPwES program funds, the team believes that the costs and savings for measures installed as a result of an audit should be attributed to the program that influenced the installation. Of note, appliance and lighting measures are limited within this program. Program participants are encouraged to make additional Energy Star purchases through the lighting and appliance programs and are provided with a Lighting catalog and appropriate information.
3. The team agreed that it would be helpful to develop and clearly state the long term vision to develop the contractor market. Inherent in this is a need to differentiate between state level policy goal and program administrator responsibilities.
4. Further, regarding the recommendation to transition to a more open market for contractors, while there was agreement, the team believes that this was addressed to a certain degree in Commission Order 25,189 approving 2011 programs and that the utilities are addressing this item while also balancing customer service, quality, budget and program management responsibilities.
5. The team did not agree with the recommendation that contractor prices should be dictated by the market – at least not completely dictated. The current program model is for a statewide program providing consistent services throughout all of New Hampshire. While the team agrees that there could be aspects of this complex issue that could be discussed further, the current limited scope and funding of the pilot requires that the administrators balance many factors to maintain program cost effectiveness.
6. The team did not agree with the recommendation to conduct more frequent evaluations of the HPwES, but believed that all evaluation priorities need to be considered and balanced with the overall evaluation needs of all programs across the Core portfolio.
7. The team agrees that consumers and the program benefit from marketing that emphasizes the benefits of improving home comfort and reduced energy bills. The scope of this recommendation was not clear as current program marketing materials do incorporate these concepts. Due to limited program funds the overall scope of marketing needs to be balanced with participation goals. Marketing methods need to evolve and match the scope and goals of the program.
8. The current program administrators currently report savings in both kWh and MMBTU. Savings estimates could be further disaggregated by fuel type if needed.

Residential New Construction Programs

1. The team is in agreement with the recommendations that coordination should continue between the gas and electric utilities, and that trainings should be offered to prepare the contractor market for Energy Star 3.0. (both of these are items that the utilities are actively working to address).
2. The Chapter Team was not opposed to the evaluation of the potential for offering a statewide geothermal program, but agrees that due to the limited SBC dollars, alternate sources of funding should be considered.

Residential Retail Products Programs

1. The team does not agree with the recommendation to transition the lighting program to “upstream incentives.” A key feature of the existing program design is that consumers “self select” at the point of purchase to participate in the program based on individual need. The current model has certain advantages which include: it collects customer data so that it is readily available to program evaluators; it directs limited program funds back to customers thus directly influencing their decisions; it allows for a larger range of retailer participation – a result which is felt to be appropriate for a small market such as NH.
2. The team agrees that it is important to consider program enhancements and alternate models and that it could be beneficial to assess the potential for regional and national efforts. In addition, there could be opportunities to expand marketing and education to promote efficiency in consumer electronics at the point of purchase to assist consumers as they make decisions regarding purchases. Did not want to dilute the EnergyStar brand mass market only mass market program

Residential heating, ventilation and air conditioning (HVAC) equipment Programs

1. The chapter review team agrees with the recommendation to emphasize “right-sizing” of heating equipment and the relationship of HVAC systems to whole-house weatherization. Energy Auditor training classes include this material in current curriculum. Training offerings directed at the HVAC contractor sector may be beyond the scope of the Core programs
2. The team acknowledges the recommendation that an HVAC focused EE program should optimally address heating technologies across all fuel types but are mindful that the PUC is currently engaged in a Docket evaluating the expenditure of SBC funds on fuel neutral savings.
3. The chapter review team agreed (do we) that additional high efficiency and/or Energy Star air conditioning technologies should be reviewed for possible inclusion in programs such as Energy Star New Homes Construction and the Residential Retail Products program.

Educational programs

1. The Team agrees the utilities should continue to collaborate and invest in energy code training and education activities. There is also agreement that there could be benefit to

enhancing the reporting of program activities to more clearly communicate the program goals and impacts of training and education activities.

Background

In NH, residential buildings account for nearly 41% of electricity use, 45% of fuel oil consumption and 19% of natural gas use. Each of the approximately 592,000 households in New Hampshire is a potential site for energy savings. Given the age of the housing stock, the heating requirements in winter, increasing cooling demands in summer, and the growing number of electrical appliances and “plug loads” in homes, there is substantial opportunity for increasing energy efficiency in these residences, thereby reducing demand (and costs) for electricity, fossil fuel, natural gas, and other energy resources.

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