



MEMO

To: Joe Gennello and Kevin Burke, Honeywell
 From: Rebecca Foster, VEIC
 CC: Chris Badger, Nick Lange, Ken Tohinaka, and Alison Hollingsworth, VEIC
 Date: December 23, 2013
 RE: Overview of Products Savings Protocols Changes

The table below indicates the changes that VEIC made to the savings protocols for efficient products.

Products	Change Made
<u>Consumer Electronics</u>	
<ul style="list-style-type: none"> Advanced Power Strips - The actual measure life for the Advanced Power Strips (APS) does not appear to be included. The measure life for the APS is 4 years. The reference for that estimate is David Rogers, Power Smart Engineering, October 2008: "Smart Strip Electrical Savings and Usability", p22. 	Updated measure life
<ul style="list-style-type: none"> Set Top Boxes – No changes are currently necessary, but recommend updating later in 2014 to reflect new ENERGY STAR specification currently in review and industry actions to meet timeline for voluntary energy efficiency agreement. 	No changes
<u>Appliances</u>	
<ul style="list-style-type: none"> Clothes Dryers – An ENERGY STAR specification for clothes dryers is set to be released in Q1 2014 and the development of a protocol for dryers is recommended to support the 2014 NJCEP program plans. Added Emerging Technology Award specification. 	Added
<ul style="list-style-type: none"> Dishwashers – Dishwashers are not currently supported through the NJCEP EE Products Program, but if this is to change in the future, we recommend updating the protocol to reflect the new ENERGY STAR specification and federal standard from 2012. 	Removed
<ul style="list-style-type: none"> Refrigerators – Removed ENERGY STAR refrigerator and left CEE Tier 2 savings protocol. No additional changes are currently necessary, but we recommend updating the protocols in Q3 2014 to reflect a new ENERGY STAR specification (V 5.0) and federal standard (2015). 	Removed ES refrigerator
<ul style="list-style-type: none"> Clothes Washer - Removed ENERGY STAR clothes washer and left CEE Tier 2 savings protocol. No additional changes are currently necessary, but we recommend updating the protocols in 2015 to 	Removed ES Clothes Washer

reflect an anticipated new ENERGY STAR specification (V 7.0) and federal standard (2015).																																																	
<ul style="list-style-type: none"> Pool Pumps – Pool pumps are not currently supported through the NJCEP EE Products Program, but if this is to change in the future, we recommend updating the protocol to reflect the new ENERGY STAR specification. 	Removed																																																
<ul style="list-style-type: none"> Room Air Conditioners – We recommend updating the savings protocol to reflect a new ENERGY STAR specification (10/2013) and upcoming update to the federal standard (2014). New ENERGY STAR process initiated to address increases to federal standard. 	Updated																																																
<ul style="list-style-type: none"> Dehumidifier – Changes to both the ENERGY STAR specification and federal standard occurred in Q4 2012 and should be reflected in the protocol. 	Updated																																																
Lighting																																																	
<ul style="list-style-type: none"> We explored whether lighting protocols changes are needed given new minimum efficiency standards that will take effect in 2014. The answer depends on the duration for which the protocols will remain in place. The current protocols are acceptable through July 2014. However, if the protocols will be used through the end of the year, we would recommend modifying them to reflect the full effect of the standards, which will be felt in the second half of the year. 	No changes																																																
<ul style="list-style-type: none"> Below is a table presenting the savings estimates being used by other energy efficiency programs in the region for their efficient lighting measures. The table is more fully explained in the bullets that follow. 																																																	
<table border="1"> <thead> <tr> <th></th> <th colspan="4">2013</th> <th colspan="2">2014</th> </tr> <tr> <th>State</th> <th>CFL ΔWatts</th> <th>CFL Hours</th> <th>CFL ISR</th> <th>CFL ΔkWh</th> <th>CFL ΔWatts</th> <th>CFL ΔkWh</th> </tr> </thead> <tbody> <tr> <td>NJ</td> <td>48.5</td> <td>2.8</td> <td>83%</td> <td>41.34</td> <td>48.5</td> <td>41.34</td> </tr> <tr> <td>MA</td> <td>48.0</td> <td>2.8</td> <td>95%</td> <td>46.60</td> <td>43.0</td> <td>41.75</td> </tr> <tr> <td>VT</td> <td>43.6</td> <td>1.9</td> <td>77%</td> <td>23.30</td> <td>37.0</td> <td>19.77</td> </tr> <tr> <td>Mid-Atl</td> <td>38.4</td> <td>3.2</td> <td>92%</td> <td>40.57</td> <td>23.8</td> <td>25.16</td> </tr> <tr> <td>CT</td> <td>32.5</td> <td>2.8</td> <td>100%</td> <td>32.86</td> <td>29.3</td> <td>29.57</td> </tr> </tbody> </table>		2013				2014		State	CFL ΔWatts	CFL Hours	CFL ISR	CFL ΔkWh	CFL ΔWatts	CFL ΔkWh	NJ	48.5	2.8	83%	41.34	48.5	41.34	MA	48.0	2.8	95%	46.60	43.0	41.75	VT	43.6	1.9	77%	23.30	37.0	19.77	Mid-Atl	38.4	3.2	92%	40.57	23.8	25.16	CT	32.5	2.8	100%	32.86	29.3	29.57
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<ul style="list-style-type: none"> There is a wide degree of variation between states in the estimated difference in power (delta Watts) between baseline lamps and CFLs, but also in the hours of use and in-service rate (ISR). This variation increases in 2014 based on the impact of the more the bulbs (45W & 60W) being impacted by the Energy Independence and Security Act (EISA). However, the 2013 estimated energy savings (kWh) is significantly affected by state by state estimates of hours of use and in-service rates, and to a lesser extent by direct impacts from EISA standards. 																																																	



- The impacts of EISA in 2014 will likely be delayed based on the difference between the date of manufacture (new EISA standards for 45W & 60W equivalents go into effect) and the new EISA-compliant products being on the shelf in retail stores. In addition, it is not well understood as to how much stockpiling of pre-2014 45W & 60W bulbs by retailers will impact the sell through of the older bulbs before the full impact of EISA is felt in 2014. This resulted in the earlier proposal to hold the current savings at the 2013 level for the 1st half of 2014.
- A 2013 Massachusetts ENERGY STAR Lighting Program report looked at the early impacts of EISA. As part of this report, a customer survey suggested a moderate likelihood that customers will stockpile 75W bulbs prior to the bulbs no longer being found in stores. In the same report, the authors questioned whether a more significant stockpiling would take place by retailers and customers prior to the impact of EISA on the 45W and most popular 60W bulbs.

Figure 2-12: Likelihood to Stockpile Incandescent Bulbs

