

Energy Efficiency 2019 Update



An Exelon Company

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Context

- As part of the ongoing PSC docket regarding PSC review of the EEAC's recommendations, DPA asked Delmarva Power to refresh/update its EEAC approved energy efficiency model and plan to reflect market changes and Federal lighting regulations
- Two cases modeled: with and without a "Hard EISA [Energy Independence & Security Act]"
 - Previous change in lighting standards (incandescent phase-out) were accompanied by a sell-through, where current inventory was allowed to be sold, rather than a total stop in sales of incandescent lightbulbs.
 - Lack of clarity on 2020 lighting standards- significant action by current administration to negate or bypass, but outcome is unclear
 - One model shows effects of full ban in 2020 on halogens, the other shows a sell-through comparable to previous standard change (where retailers stockpiled several years worth of legacy bulbs)
- Avoided cost assumptions unchanged



Market Changes

- Consumer Products
 - Incremental cost of LEDs has dropped by nearly half
 - Updated experience from Delmarva Power MD resulted in higher number of measures, greater proportion of specialty bulbs
 - Clothes washers- incremental cost dropped significantly
 - Refrigerators, Room AC: incremental costs and savings dropped
 - Dehumidifiers: incremental costs dropped, savings increased
 - Heat pump water heaters: lifetime increased, incremental costs increased
- Behavioral
 - Substantial drop in cost due to economies of scale as part of Exelon merger
 - Based on experience in MD & NJ, as well as national trends, moved to a one year measure life



Results

Program	Budget	Net Energy Savings (MWh)	Peak Demand Savings (MW)	Benefits (\$ million)	Costs (\$ million)	TRC	EEAC TRC
Consumer Products	\$11,264,851	21,194	2.704	\$17.22	\$11.24	1.53	2.18
Behavior Based	\$6,342,105	23,636	5.714	\$13.70	\$5.58	2.45	2.93

Original Model

Program	Budget	Net Energy Savings (MWh)	Peak Demand Savings (MW)	Benefits (\$ million)	Costs (\$ million)	TRC	EEAC TRC
Consumer Products	\$8,828,693	12,500	1.587	\$8.98	\$7.11	1.26	1.74
Behavior Based	\$3,095,642	25,678	5.930	\$4.56	\$2.72	1.68	1.96

Program	Budget	Net Energy Savings (MWh)	Peak Demand Savings (MW)	Benefits (\$ million)	Costs (\$ million)	TRC	EEAC TRC
Consumer Products	\$8,828,693	23,424	2.950	\$17.15	\$7.11	2.41	3.34
Behavior Based	\$3,095,642	25,678	5.930	\$4.56	\$2.72	1.68	1.96

"Hard-stop" Model

"Sell-Through" Model

