

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Comments by Comverge, Inc. Regarding the	:	
Petition of PPL Electric Utilities Corporation for	:	Docket No. M-2015-2515642
Approval of its Act 129 Phase III Energy	:	
Efficiency and Conservation Plan	:	

COMMENTS BY COMVERGE, INC.

Pursuant to the notice published in the Pennsylvania Bulletin on December 12, 2015, Comverge, Inc. ("Comverge"), a leading demand response provider, hereby submits these comments on PPL Electric Utilities Corporation's ("PPL") Act 129 Phase III Energy Efficiency & Conservation Plan ("EE&C Plan" or "the Plan") submitted to the Pennsylvania Public Utilities Commission on December 4, 2015, pursuant to the requirements of Act 129 of 2008, 66Pa. C.S. § 2806.1 ("Act 129") and the Pennsylvania Public Utility Commission's ("PUC" or "Commission") *Implementation Order* entered on June 11, 2015, at Docket No. M-2014-2424864.

I. Introduction

Comverge is an industry leader in providing integrated demand response ("DR"), energy efficiency ("EE"), and customer engagement solutions that enable electric utilities to ensure grid reliability, lower energy costs, meet regulatory demands, and enhance the customer experience. Through its combination of software, hardware, and services, Comverge helps utilities optimize every aspect of a demand management program, from participant recruitment and device installation to call center support, control events, and measurement and verification. Comverge has worked with hundreds of

electric utilities to deploy six million energy-management devices and enroll more than 1.8 million residential customers into mass-market demand management programs across the United States, including Pennsylvania. Comverge is also the only DR provider to offer mass-market services to utilities on a “pay-for-performance” basis in which we invest our own capital to build out a DR program and receive payment only for capacity that we successfully deliver.

Comverge appreciates this opportunity to provide input on the EE&C Plan and offers the following comments, which primarily address the potential role of residential and mass-market DR in this phase of Act 129 implementation. We submit these comments in light of the evolutionary nature of Act 129 and the multiple phases of EE&C planning, and are providing input based on three decades of experience in advanced energy management. Comverge applauds Pennsylvania’s leadership in recognizing the importance of demand side management and customer engagement through the Act 129 proceedings, and notes the strides made by PPL thus far in their earlier phase planning. However, we feel that the Company has overlooked a key component of a comprehensive energy management portfolio by omitting residential DR programs in the current plan. Our position is based both on our experience in multiple jurisdictions and third party forecasts that continue to demonstrate the potential of expanded DR in the sector.

II. PPL’s EE&C Plan Misses an Opportunity for Residential DR

PPL includes nine programs across five customer sectors in their EE&C Plan that will be continued from Phase II and new DR programs for the Small C&I, Large C&I, and Government/Nonprofit/Educational (“GNE”) sectors, which are forecasted to provide an aggregate

peak reduction of 115 MW.¹ However, by not including a residential DR offering, we feel the Company runs the risk of missing out on the full value of DR for their customers and not fully achieving the stated objective of the Plan to “provide customers with a cost-effective, equitable, flexible, and wide-ranging set of programmatic choices.”² Residential DR, such as the services and products in Comverge’s portfolio and those that we have deployed with PPL, would provide one of the most effective available channels to simultaneously deliver both capacity savings and increased customer engagement.

As stated above, we have experience in delivering peak savings in Pennsylvania with PPL and other regulated utilities across the state. During Phase I of Act 129 implementation, Comverge worked with PPL to launch a pay-for-performance residential DR program that delivered over 35 MW of peak reduction to over 40,000 customers in their service territory.³ Comverge took over the assets of the Peak Savers program in 2013 at the conclusion of Phase I and it is now our only program that is solely reliant on PJM's forward capacity market for program funding. If PJM's Capacity Performance product continues as it is currently structured,⁴ the program will likely not continue past 2017 without a utility partner. If, for example, PPL were to once again administer the program with Comverge, they would be able to leverage existing assets and customer relationships, thus avoiding the transaction costs that go with recruitment, installation, and new hardware, while adding a cost-effective residential DR program and the resulting peak savings to their EE&C Plan..

¹ *PPL Act 128 Phase III EE&C Plan, Exhibit 1, Docket No. M-2015-2515642, Table 1, p.1*

² *PPL Act 128 Phase III EE&C Plan, Docket No. M-2015-2515642, p. 8*

³ *The Cadmus Group, Process Evaluation Report: PPL EE&C Plan, Program Year Three [Phase I], Nov. 15, 2012, p. 40-41*

⁴ PJM is transitioning off of the base residual auction (BRA) mechanism to the Capacity Performance (CP) product, which will be the only capacity product in PJM as of the 2020 auction. Among other things, CP significantly increases the financial penalties for non-performance year round, while adopting an approach that devalues season-specific resources such as DR, regardless of economic or system benefit.

III. Third Party Analyses Show Untapped Potential for Residential DR

The benefits of DR – both in terms of customer interaction and resource planning – are well documented,⁵ and two recent analyses are of particular relevance to the Phase III EE&C plans: FERC's *Assessment of Demand Response & Advanced Metering*⁶ and the *Demand Response Potential Study for the State of Pennsylvania* ("DR Potential Study").⁷ Both show significant potential for residential DR at the national, state, and utility level. FERC's report shows a significant opportunity for residential DR in the NERC region that covers PPL's service territory, forecasting that the ReliabilityFirst Corporation (RFC) region could see 1,545 MW in peak reduction through residential DR programs alone, representing approximately 29% of the total potential peak savings.

More specific to Pennsylvania, the statewide DR Potential Study shows that PPL has the second highest forecasted residential summer peak load among the seven regulated electric utilities and shows significant potential for residential savings under either of the scenarios modeled for the future of economic DR in PJM's forward capacity market.⁸ Given these analyses and the implication of significant capacity and cost benefits, plus the existing DR assets in their service territory, we encourage the inclusion of residential DR in PPL's Plan.

⁵ For a list of potential studies and other resources that provide a record of achieved and forecasted capacity savings from DR, see the MADRI site published by Energetics: <http://sites.energetics.com/madri/resources.html>

⁶ See: FERC, *Assessment of Demand Response & Advanced Metering* (Staff Report), December 2015, <http://ferc.gov/legal/staff-reports/2015/demand-response.pdf>

⁷ See: GDS Associates, et al. *Demand Response Potential – Pennsylvania*, February 25, 2015. Converge would like to note our agreement with the report's assessment that the 100-hour requirement under the Act 129 proceeding is problematic because it creates a significant barrier to cost-effective DR. Our position is based on our experience with a variety of technologies across the country and is shared by other DR providers that operate in the residential, commercial, and industrial sectors.

⁸ GDS Associates, et al. *Demand Response Potential – Pennsylvania*, February 25, 2015, p.10

IV. Leveraging DR for The Mass Market

The residential market is often overlooked for DR, primarily because the multiple points of installation and relatively small savings per customer have historically meant a time consuming and costly process for utilities. But with new recruitment approaches, products, shifting consumer attitude toward demand response, and evolving customer expectations, we are in an ideal time for expansion of residential DR. Our business is concentrated on this market for the very reason that we see this as having the greatest untapped potential for peak savings and customer engagement.

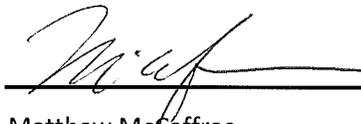
Through a combination of targeted demand management, wifi-enabled thermostats, and traditional DR products, all enabled through in-house expertise in recruiting and retention, we are seeing this market rapidly evolve toward a new era of demand response.

Capacity savings continue to be the primary objective and rubric for residential DR, but we have seen through multiple deployments that these programs also provide an ideal channel for customer engagement and systemic benefits to utilities. With a device in the home, the interaction with the customer can be more immediate and reciprocal, and can be used to offer more programs and resources that complement DR. Controllable thermostats in particular provide additional capability to drive higher kWh savings that could further bolster PPL's proposed offerings through an existing channel with very low incremental costs per additional kWh. These programs also create additional efficiencies for measurement and verification both of peak savings and additional energy efficiency measures. And by leveraging usage data, companies like Converge can work with utility clients to generate insights about market segments within their service territory and identify which channels are the most effective for reaching them.

V. Conclusion:

For the reasons outlined in the above comments, Comverge believes that the exclusion of residential demand response in PPL's Phase III Energy Efficiency and Conservation Plan presents a missed opportunity for cost savings, resource planning benefits, and increased customer engagement in an underserved market. We encourage the inclusion of residential DR programs, such as the ones Comverge offers, in the final Phase III Plan and point to the past successes of residential DR within the PPL footprint.

Respectfully Submitted,



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