

VIA ELECTRONIC MAIL

The Energy Master Plan Committee
(emp.comments@bpu.nj.gov)

Re: New Jersey Draft Energy Master Plan Stakeholder Comments

Dear Committee Members:

Thank you for the opportunity to participate in the Energy Master Plan public stakeholder meeting held Sept. 3, 2019 in Hackensack. Attached please find my written comments supporting the presentation delivered at this meeting.

Respectfully submitted,

JOHN RADGOWSKI
Vice President, Industry Solutions

Comments of Landis+Gyr In the Matter of New Jersey Draft 2019 Energy Master Plan

On Sept. 3, 2019, John Radgowski, Vice President of Industry Solutions at Landis+Gyr, delivered comments at a public hearing of the New Jersey Board of Public Utilities (“Board”) in Hackensack, NJ. These comments and additional background citations are respectively submitted for consideration by the Board.

Background

Landis+Gyr is a leading provider of smart grid and metering solutions to the utility industry worldwide. The company provides advanced meters, smart sensors, communications infrastructure, software and services to many of the largest electric, gas and water utilities in the world. Successful deployment of its smart grid solutions at utilities such as Oncor, Ameren, APS, TEPCO and Hydro-Québec have enabled countless benefits for consumers and the utility industry. The adoption of grid modernization by these utilities through dynamic pricing, analytics and load management is supporting the goals of renewable integration, grid resiliency and consumer engagement. It is from this perspective and experience that Landis+Gyr offers the following comments on the importance of advanced metering to execution of the New Jersey Energy Master Plan.

The Importance of Advanced Metering Infrastructure (AMI)

The electric meter is the main demarcation point between the consumer and the utility. It represents the point where consumers are connected to energy resources. For decades, information from meters was only made available on a monthly basis, leading to a rear-view mirror perspective of energy consumption. This delay in information often created customer frustration over unexpected energy charges. At the same time, utilities were left using models and predictive analysis rather than direct measurement to make planning and grid management decisions.

The evolution of the electric meter over the past 15 years has greatly improved the frequency and amount of information that can be used to drive both direct consumer and utility operational benefits. Improved safety, increased energy efficiency, consumer empowerment and support for clean energy applications (e.g. electric vehicles) are just a few of the benefits being realized.

I’m sure you’ve heard the expression, “Knowledge is power.” In the case of advanced metering, “Knowledge saves power.” And the continuing advancement of grid intelligence is sharing that knowledge with all stakeholders.

Consumer Benefits

From a consumer standpoint, advanced metering provides the means to stay informed of energy-related costs and gain insight into energy usage before being billed for it. This information can also lead to involvement in energy efficiency programs and services.

Intelligence built into advanced meters can also help utilities identify potential safety issues, such as “hot sockets” caused by damaged meter service panels.

Advanced metering also provides the ability to rapidly communicate outage information. Not only does this result in faster restoration times, but it also greatly reduces miles driven by repair crews and provides a way to keep consumers updated in real-time about the status of their service restoration.

Utility Benefits

From the utility perspective, advanced meters go far beyond the traditional role of measuring consumption. Advanced meters are true grid-edge sensors that provide the tools for optimizing voltage, analyzing power quality and helping field crews do their jobs more safely and efficiently.

As mentioned, access to outage information from the meter not only benefits consumers, it also assists utility crews while restoring power by, among other things, locating and identifying nested outages that may otherwise be missed. Process improvements like these result in an expense reduction with the earlier release of mutual aid and overall environmental improvements from the reduction of fleet miles driven, fuel consumption and carbon emissions.

Real-time data from every meter on the system is essential for integrating distributed energy resources without disrupting the quality and availability of power. At the same time, the planning process for maintaining, replacing and building the grid of the future depends upon this information.

Advantages for Clean Energy Adoption

Forty-seven state regulatory bodies have moved forward with advanced metering to date, providing the above-mentioned benefits to communities served. The three states that have not yet adopted AMI are West Virginia, Rhode Island and New Jersey.

New Jersey’s Draft Energy Master Plan references a number of the advantages grid modernization and advanced metering have for consumer adoption of clean energy. These include modified rate design, managed electric vehicle charging, and support for demand response.

Advanced metering represents a way for both utilities and their customers to gain insights that can be used to improve efficiency and benefit from reliable energy resources in a sustainable way.

Supporting Resources

1. The DOE’s Voices of Experience report on AMI

https://www.smartgrid.gov/files/VOEAMI_2019.pdf

2. Public Power: Report on AMI applications

<https://www.publicpower.org/periodical/article/utilities-using-ami-infrastructure-data-multiple-ways>

3. HECO’s plan for renewable integration

<https://www.greentechmedia.com/articles/read/distributtech-spotlight-hawaiis-interoperable-grid-comms-next-gen-grid#gs.2pqq7d>