Where Things Stand on Standby Rates (August 2019)

By Jamie Scripps, Hunterston Consulting LLC

Jamie Scripps is a principal with Hunterston Consulting LLC, where she offers advanced energy policy expertise to clients across the Midwest. Jamie's standby rate research has been featured in a number of proceedings throughout the country, and she is a recognized expert on policies related to cogeneration. In 2016, Jamie was featured as a Midwest Energy News "40 under 40" awardee. Prior to founding Hunterston Consulting LLC, Jamie was a partner with 5 Lakes Energy LLC.

Acknowledgments

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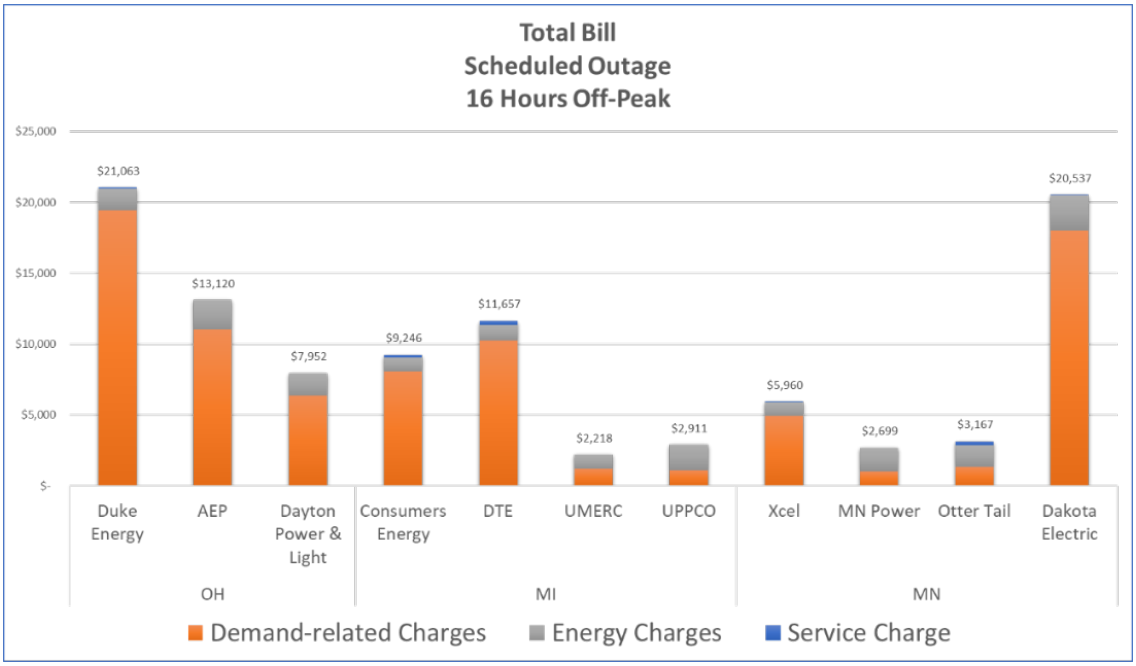
Executive Summary

In 2015, the Great Plains Institute (GPI) engaged 5 Lakes Energy to provide support for its combined heat and power (CHP) policy work in the Midwest. That summer, GPI requested that 5 Lakes Energy provide technical assistance to support its standby rate work in Minnesota. Working in a collaboration among Fresh Energy, GPI, and Midwest Cogeneration Association, with additional input from the Energy Resources Center at the University of Illinois at Chicago, 5 Lakes Energy developed the "apples-to-apples" standby rate analytical tool to inform stakeholder comments in Minnesota Public Utilities Commission (PUC) Docket No. 15-115.

In order to evaluate the rate design features of a utility's approach depending on variations in customer behavior, the "apples-to-apples" standby rate analysis examined published tariffs to compare estimated bills across a range of CHP system outage scenarios. The "apples-to-apples" standby rate comparison was important for highlighting the wide variation of standby charges experienced by customers on a monthly basis, depending on the location of a CHP system in a particular state and electric utility territory. The "apples-to-apples" comparison also highlighted key rate design features, including, for example, whether a particular utility's standby rate design differentiated between scheduled and unscheduled CHP system outages, and whether demand charges were pro-rated based on on-peak consumption. Figure 1 illustrates the "apples-to-apples" estimated monthly standby bills for a customer experiencing a 16-hour off-peak CHP system outage. Ideally, a customer would experience lower standby charges during an off-peak outage. The figure below illustrates both the wide variation in monthly standby charges and the heavy reliance by most utilities on demand charges in standby rate design.

Figure 1. "Apples-to-Apples" Monthly Standby Bill for 16-hour Off-Peak CHP System Outage



Since 2015, the "apples-to-apples" standby rate tool has been used in a variety of rate proceedings and workshops across a number of states. As a result of these efforts, regulators and utilities have made changes to more closely tie standby rates to cost of service, increase rate design transparency, and reduce standby rate costs to customers:

- DTE Rate Case, U-18255 (Michigan): Order directing that standby service reservation fee be based on forced outage rate of best-performing generators.
- DTE Rate Case U-18255 (Michigan): Order directing that standby customers' on-peak daily demand charge rate be set at 1/10th of the full requirements demand charge rate.
- DTE Rate Case U-20162 (Michigan): Order re-affirming reservation fee and demand charge directives from U-18255.
- Duquesne Light Company R-2018-3000124 (Pennsylvania): Order affirming pro-rated distribution charges for standby customers.
- Consumers Energy Case U-20134 (Michigan): Settlement agreement in which utility will provide a study analyzing the distribution system costs associated with serving standby service customers.
- Dayton Power & Light (Ohio): Utility eliminated its generation demand charge, significantly reducing monthly standby charges.
- Transparency increased in Michigan and Minnesota.

Additionally, earlier this year, the National Association of Regulatory Utility Commissioners (NARUC) adopted a resolution:

- Supporting "further exploration" of issues related to standby rates;

- Reaffirming that rates should be "simple, transparent, and consistent;" and
- Encouraging commissioners to ensure standby rates acknowledge that CHP and WHP [waste heat to power] can reduce demand and costs and improve system reliability and resiliency.[1]

With NARUC highlighting the importance of reasonable standby rates, there is a need for continued work around codifying emerging best practices in standby rate design. A standardized approach to standby rates rooted in accepted best practices in rate design would provide customers with transparency and clarity about costs and, in many cases, with improved economics for CHP systems.

Accepted best practices in standby rates are beginning to emerge based on the work done to date, but additional work is needed to further define and standardize these practices, including the need to test these emerging recommended practices with interested stakeholders such as regulators, potential CHP users, developers, technical experts, and utilities. So far, emerging best practices for standby rate design include:[2]

- Rates should be transparent, fair, and aligned with the cost of service.
- Rates should incent efficient operation and maintenance of CHP systems.
- Reservation fees should be small (or non-existent) and should take into account a CHP system's reliability.
- Rates should not include demand ratchets.

Overall, standby rates should attempt to align customer rates with the actual costs imposed on the utility's system and should provide appropriate incentives for proactive maintenance and efficient operation of the CHP system.[3]

The 2019 NARUC resolution supporting "further exploration" of issues related to standby rates highlights standby rates as a continuing hot topic across the country. When utilities engage in a thoughtful examination of their standby rate designs, as has been demonstrated across the Midwest, it is a win-win situation, allowing the numerous benefits of CHP to accrue to customers, utilities and the grid as a whole. Now is the time to test the best practices that have emerged from the past four years of regulatory work with stakeholders to assess how they are working with actual CHP proposals. This work will offer a more transparent, standardized approach to utilities and regulators seeking to reduce and eliminate barriers to customer-sited generation.

[1] *See* Alliance for Industrial Efficiency, NARUC Acts to Reduce Barriers to Clean Combined Heat and Power and Waste Heat to Power, February 13, 2019, *available at* https://alliance4industrialefficiency.org/naruc-acts-to-reduce-barriers-to-clean-combined-heat-and-power-and-waste-heat-to-power/.

[2] Great Plains Institute, "Improving Standby Rate Design Would Help Industries Increase Efficiency, Reduce Emissions, and Save Money," (March 2018), *available at* https://www.betterenergy.org/blog/standby-rates-barriers-combined-heat-and-power/.

[3] *See* Alliance for Industrial Efficiency.