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In the Matter of the Commission's Review of Chapter 4901:1-22, Ohio Administrative Code, Regarding Interconnection Services.	)))	Case No. 12-2051-EL-ORD

SUPPLEMENTAL COMMENTS OF FOSDICK & HILMER, INC.

Fosdick & Hilmer submits the following comments in response to the Public Utility Commission of Ohio request for supplemental comments related to its review of electric interconnection services and standards.

Response to Question 10-a:
Generation is a market based service and EDUs should not offer generation-related services in their standby tariff. The customer should have the choice of obtaining standby generation either from the EDU at the published SSO rate or from a CRES provider at a negotiated rate.

Response to Question 10-b:
For most customers short duration outages will cause considerable disruption of their operation; however there may be some customers with the ability to take interruptible distribution service. Those customers could benefit from an interruptible rate.

Interruptible distribution service curtailment should be based on the capacity of the distribution feeder circuit and its real time loading, not regional generation or transmission restraints. The recent installation of smart grid technology by Ohio EDUs should allow the EDUs the ability to remotely monitor feeders and make curtailment decisions for minimal investment. See the Response to Question 10-d for further discussion of this concept.

Response to Question 10-c:
Customers with multiple generating units at the same location or the ability to curtail load may choose to contract for uninterruptable distribution capacity that is less than their total demand. Under most circumstances these customers will schedule their operations to manage demand at or below the contract capacity. However there may be occasions when these customers are performing scheduled maintenance and require additional distribution capacity for a short period of time. For these customers the ability to schedule additional distribution service during off peak periods would be useful. See the response to question 10-d for further discussion of this concept.

Response to Question 10-d:
A universal standby rate template would simplify the process of determining the cost of standby power. A simplified process would give project developers a clearer picture of their actual costs, benefiting the development of distributed generation projects throughout the state. Fosdick & Hilmer proposes two rate structures for distribution rates, uninterruptable service and interruptible service. Customers may choose one or both rates depending on their needs.

Uninterruptable distribution service is for customers that require maximum electrical power availability. The customer reserves the amount of capacity required to meet its uninterruptable standby service needs. For a standby service uninterruptable reservation the customer is charged the greater of either:

- The actual KW demand utilized for uninterruptable standby service during the previous month.
  –or-
- The standby service KW reservation * The EDU minimum demand ratchet

Interruptible distribution service is for customers that have the desire and capability to receive interruptible distribution standby service. The EDU has the right to deny the customer use of interruptible standby service capacity whenever the feeder circuit real time loading reaches peak capacity.

The determination of peak capacity periods for this service should be based on the time of year and historic loading of the feeder circuit. EDU imposed capacity limitations should also be based on the actual loading of the distribution feeder circuit, not regional generation or transmission limitations. For example it may be possible for one customer on a fully loaded feeder to contract additional capacity 24x7 in winter months, and be limited to weekends only during summer months. Meanwhile a different customer on a lightly loaded feeder may be able to contract additional capacity 365 days per year.

For a standby interruptible service the customer is charged the greater of either:

- A minimum monthly fee to administer the program.
  -or-
- The actual KW demand utilized for interruptible standby service during the previous month.

Response to Question 10-e:

Rates:

Individual distributed generators provide benefits to the bulk power system by increasing the generation capacity and decreasing transmission system demand in the region. For this reason a customer with generation assets should be charged a reduced rate proportional to its reduced utilization of transmission and generation capacity. As multiple customers within a region add distributed generation their diversity of random failure events act together to further reduce the demand on transmission and generation capacity. The following three examples illustrate the benefits provided by a diversity of units and we believe those benefits should be reflected in customer rates.

Example 1:

There are two customers. Each customer has 6MW of demand. If neither customer installs generation capacity the bulk power system must have 12MW of generation and transmission capacity available to service these customers at all times.

Example 2:

One of the customers installs a 6MW CHP project with an availability factor of 90%.

- 90% of the time the demand on the bulk power system is reduced to 6MW.
- 10% of the time peak demand on the bulk power system remains at 12MW.

Example 3:

Both customers install a 6MW CHP project with an availability factor of 90%.

- 81% of the time both generating units are available and demand on the bulk power system is reduced to zero.
- 18% of the time one unit is available and peak demand on the bulk power system is 6MW.

- 1% of the time both units are unavailable and peak demand on the bulk power system remains at 12MW.

Territories:
Results of the PJM 2015/2016 capacity auction revealed transmission constraints in the ATSI service territory that resulted in capacity prices that are double those of the rest of the state. These limitations imply that there are two distinct transmission and generation capacity regions in Ohio. Fosdick & Hilmer proposes there should be two regions used to determine the benefits of multiple generating units. The first region is ATSI service territory. The second region is the balance of Ohio service territories comprised of AEP, Dayton, and DEOK service territories.

Respectfully submitted,

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