BEHIND-THE-METER AGGREGATION

MITSUBISHI ELECTRIC
MITSUBISHI ELECTRIC POWER PRODUCTS, INC.

PROBLEM

As behind-the-meter Distributed Energy Resources (DERs) proliferate, distribution utilities are seeing growth in the number of Demand Side Management (DSM) programs within their territories. Many utilities have programs for thermostats, energy storage, EV charging, water heaters and more. Often times these programs may be run by a separate Demand Response Management System (DRMS). When utilities need to make a demand response call to lower their peak, DR Operators may need to issue several manual events. Additionally, many DRMS systems are IT systems that are internet facing and reside outside of the operational infrastructure, creating a lack of visibility for utility operators.

SOLUTION

Our DER Aggregation module, powered by Strata Grid, provides a quality solution to the problem. By deploying our DER Aggregation module, Strata Grid aggregates and provides both manual and autonomous dispatch of the DER resources within the various DRMSs. Strata Grid allows for operators to group DERs by DER attribute, location, tariff, DR Program Membership, and many more ways, all using a single user interface. As the DER Aggregation Module is part of the Grid DERMS which is designed to integrate into the utilities operational systems, Strata Grid provides utility operators the ability to see the capacity that the various DRMS programs provide.

OUTCOME

Distribution utilities are able to expand their offerings to their customers by leveraging behind-the-meter assets in more ways than traditional demand response programs. By having the grid awareness of Strata Grid, utilities can target specific needs of their system and deploy the correct assets to meet those needs. Distribution utilities will also be able to use these expanded capabilities to address the changing market conditions for DERs being introduced by FERC 2222.

Real-time DER dispatch

Autonomous DER dispatch

DER Aggregation