C&I Stakeholder Hour

Friday, June 9th, 2023
12:30 PM – 1:30 PM

Zoom Meeting

Meeting Notes

ConnectedSolutions and Active Demand Response Presentation

- See attached slides

ConnectedSolutions and ADR Q&A:

1. **How can the list of qualifying battery energy storage systems (BESS) get updated?**
   - Please use this website for residential BESS information: https://www.masssave.com/residential/rebates-and-incentives/connectedsolutions-batteries#one-ref
   - PAs will be updating this list in the coming weeks to add newly enrolled manufacturers.

2. **Can more detail about the grandfathering provisions be provided? Would a battery that hadn't completed an interconnection service agreement be grandfathered in at the very end of the process or would you require a completed interconnection application?**
   - Any battery with an executed interconnection service agreement (ISA) as of June 8, 2023, will be grandfathered and will not have the 150% cap applied to their incentive earning opportunity.
   - New BESS at the same customer site will not be allowed to enroll in ConnectedSolutions and receive incentives until customer site load grows to exceed existing installed BESS capacity. In other words, ConnectedSolutions incentivized capacity will be limited to the capacity shown on the original ISA unless and until customer site load exceeds capacity shown on the ISA. Actual payments will still be determined based on measured performance during events.
   - The PAs are working with their interconnection teams to explore the possibility of allowing projects that may be resized due to the incentive cap to proceed with the new sizing without an additional application or study fees.

3. **Can you clarify how the G-3 customers calculate their annual peak? Throughout the course of the year based on the 8760?**
   - As noted in the Offering Materials, for purposes of ConnectedSolutions performance-based incentive payment calculations, sites that are exporters of power during ConnectedSolutions events will have their performance incentive capped at 150% of the site's annual peak load, independent of load associated with charging or discharging the battery and any behind-the-meter solar PV production.
   - When a new storage system is proposed for a customer site on a G-3 account, existing site load will be checked using the provided existing and active account number registering customer load and compared to the proposed size of the storage system, in kWac. For G-3 customers, customer peak site load will be established based on 15-minute interval peaks using 8,760 data throughout the full year. The annual peak will be the highest 15-minute Interval Adjusted Load from the previous calendar year. 15-minute Interval Adjusted Load will be calculated as follows:

15-minute Interval Adjusted Load = Metered Load$_{\text{Interval X}}$ + PV Output $_{\text{Interval X}}$ + Storage Discharge $_{\text{Interval X}}$ - Storage Charging $_{\text{Interval X}}$

   - In a situation where a customer elects to enroll a battery that is already installed and interconnected onsite, the customer will also need to provide data for the battery. G-3 customers will need to provide 15-minute interval data for the battery, battery charging load, and any onsite solar PV. Customer peak load will be reconstituted by adding back battery discharge (or subtracting battery charging) and adding any solar production to the observed load to determine the customer site peak load. This reconstituted peak will be used to set the performance incentive cap.

4. **Is the annual peak calculated independent of both battery charge and discharge? Is discharge added back?**
   - Yes, correct. As noted above, battery discharge will be added back to determine the reconstituted customer site peak load. Battery charging will be subtracted from the site load.

5. **It sounds as though a commercial customer who is very successful at reducing their peak demand could see reduced incentive payments as a direct result. Is this correct, and if so, isn't this contrary to the purpose of the program?**
   - See answer to Question 6 below.

6. **Is it possible that a customer could be penalized for successfully reducing their peak demand and if so, at what point would that happen?**
   - As described above, customers that are successful in reducing their peak via battery discharge or solar PV production will not see a reduced incentive payment. This is because battery discharge and solar PV production will be added back to the observed load to determine the customer site peak load for the purposes of the incentive cap. This is called "reconstituted load," meaning what the load would have been had the battery and PV system not been present.
   - For customers who are currently participating in the offering, we have already reviewed the data for battery owners who have historically participated in the ConnectedSolutions program, and they would not have, based on our calculations, been impacted by this 150% cap on the incentive payments. We do not want to penalize customers who have historically performed well.
   - Otherwise, the PAs will review customer site peak load annually. Reductions in peak site load will only be used to adjust the incentive cap downward where site load reductions are greater than 50%, such as in cases where a facility shuts down or significantly reduces its operations.

7. **Could you walk through how the 150% cap will be recalculated if a level 3 charger is added for each rate class of customer? Let's say a building has 100-kilowatt demand and plans to add one or more 150 kilowatt chargers.**
   - Adding a level 3 charger would be a significant enough change that we would potentially review the load/cap ahead of the DR season, similar to new construction, which is a provision included in the guidelines to be addressed on a case-by-case basis. Please reach out to your program administrator if there are unique situations, such as this one, that you would like to discuss.
   - If the load were not reviewed ahead of the season, that load increase would be captured following the end of the season when we reevaluate the peak each year. This review will be completed by Apr 1 each year.
   - (As a note, the G-2 peak is based on kW shown on the electric bill (not kWh) over the past 12 months. Also, adding a Level 3 DC fast charge (DCFC) may shift G-1 and G-2 customers to a G-3 rate class.)

8. **The G-1 and G-2 calculations look like they may be done based on the kWh used so if I am not sure how many kWh, I am using in advance I would like to know when the calculations occur – before or after the installation the installation of a level 3 charger or would I have to wait a year for a year's worth of use?**
   - See answer to Question 7 above.

9. **G-1 customers are based on kWh usage and if they do not know their kWh usage, can we help them determine that?**
   - Customers should be able to find the annual kWh usage on their electric bills or they can contact their Program Administrator to help them with that. The Program Administrators will then apply the hours of use calculation using the table and formula in the offering materials to determine peak load.

10. **The manual says that the program could be canceled (Cancellation of the Initiative). Would this include programs that are in the battery lock in time?**
    - The PAs cannot definitively answer that question at this time because the answer would depend on the specific facts and circumstances of any cancellation. The PAs are regulated entities and as such must abide by directives of applicable agencies and authorities such as the Department of Public Utilities and the Legislature of the Commonwealth.
    - We cannot fully predict what future regulations or statutes may require. For example, in the unexpected event that the Department of Public Utilities or the Legislature ordered a termination or suspension of all efforts, we would need to understand the exact nature of that directive and whether grandfathering or other permitted exceptions would be in place. But we do not have that information at this time and so it is not possible to give a 100% definitive answer. In all events, the PAs would carefully review any directives from the Department of Public Utilities or the Legislature before taking any actions and do anticipate working with impacted customers to support continued payments for the remainder of the rate lock period.
    - The PAs note that the most current directives from the Department of Public Utilities regarding the five-year incentive rate lock are as follows and these directives are expressly supportive of 5-year commitments:

The electric Program Administrators propose to offer performance-based incentives for each active demand reduction offering (see, e.g., Exh. Eversource Energy (electric)-2, at 57). The Program Administrators also seek Department approval to enter into five-year commitments to provide such incentives to customers that install new storage systems under these offerings (see, e.g., Exh. Eversource Energy (electric)-2, at 61-62). The Department agrees with the

Program Administrators' assessment that pay-for-performance incentives appropriately protect ratepayers because incentives will only be paid for actual performance (see, e.g., Exh. Eversource Energy (electric)-2, at 64). In addition, the Department finds that, in light of the significant upfront investment required for storage, a longer-term commitment to provide incentives is appropriate (see, e.g., Exh. Eversource Energy (electric)-2, at 61-62). Accordingly, the Department approves the electric Program Administrators' proposal to enter into five-year commitments to provide performance-based incentives to customers installing new storage systems. 2019-2021 Three-Year Plans Order, at 34.

- And, more recently:

Nonetheless, the Department has found that a rate lock may be appropriate to provide prospective battery energy storage developers and customers with a degree of certainty with respect to the incentive the customer could expect to receive. See 2019-2021 Three-Year Plans Order, at 34. *After review, the Department approves the electric Program Administrators' proposal to offer a five-year incentive rate lock for customers installing new battery energy storage systems as part of the daily dispatch offerings. The five-year lock is limited to the installation of new battery energy storage systems; after the expiration of the five-year lock, the customer may receive the then-current performance-based incentive levels.* 2022-2024 Three-Year Plans Order, at 114.

- Regulatory and legislative policy may change or evolve and so the PAs cannot make definitive statements on this topic, but current policy as articulated above is expressly supportive of five-year commitments.

11. When are the Mass Save pages showing the available energy storage systems updated?

- See answer to question 1 above.

12. Re G3 customers: For the purpose of establishing the annual site peak, it has been stated that this will be calculated using the combination of utility meters at the site minus the generation from on-site solar. Can you verify that all these meters must be supplied by the utility, including the solar meter? Importantly, can you verify that all EDCs have utility meters that are time synchronized with a central (atomic) clock? If these meters are not synchronized, calculating the combined peak is problematic.

- If a utility-supplied meter is not available, the PAs will rely on inverter data from the solar PV system.
- If there are instances where the meters are not synchronized, these will be dealt with on a case-by-case basis.

13. **Is the peak not calculated independent of the battery and solar effect on the peak? The battery and PV would lower the peak and incentive please clarify.**
    - Please see the answers to Questions 3 and 4 above. (Note that although the process for reconstituting the peak varies slightly for G-2 and G-1 customers, the basic approach of adding battery discharges and solar PV production to the observed or calculated load is the same.)

14. **Is the customer's peak load determined by kW or KVA in situations where the customer is being billed on kVa?**
    - Peak load will be assessed using kW, which is also shown on customer bills.

15. **The earliest ConnectedSolutions customers should be coming up to the end of their 5-year contracts. Do we know whether customers will be offered a second 5-year contract, and if so, will the rates change?**
    - No. The DPU Order on the 2022-2024 Energy Efficiency Plan (pg 114) notes, "The Department has found that a rate lock may be appropriate to provide prospective battery energy storage developers and customers with a degree of certainty with respect to the incentive the customer could expect to receive…. The five-year lock is limited to the installation of new battery energy storage systems; after the expiration of the five-year lock, the customer may receive the then-current performance-based incentive levels." URL: https://ma-eeac.org/wp-content/uploads/2022-2024-3YP-Order_1.31.22.pdf

16. **Given the considerable expense just to get through EDC/ISO-NE IX study process before ISAs (often in the $100k+ range per application), what would be the options for BESS applications that applied before the sizing cap? If these applications are not grandfathered and developer now needs to resize, will EDCs refund the application and study fees to date and allow applications to proceed at new sizing? Or would applications need to be rescinded, then new ones started with new fees, including for the study, all from scratch?**

    The preference would be for ALL BESS IX apps already started in IX queue to be grandfathered.

- See answer to Question 2 above. The PAs are working with their interconnection teams to explore the possibility of allowing projects that may be resized due to the incentive cap to proceed with the new sizing without an additional application or study fees.