



Economic DR CBL Approach vs. Load Management PLC Approach

SODSRTF
August 2, 2018

- The proposal is to adjust the load forecast with the intent to get the most accurate representation of the customer's expected real time energy consumption: the customer baseline (CBL).
- The CBL is effectively the customer's real time energy load forecast and therefore the CBL – measured load is expected to be a more accurate representation of the load reduction.
- The CBL varies by hour and by day based on conditions on that day whereas the PLC is one number applicable for the entire summer and therefore a load reduction based on PLC – measured load may not be as accurate.

- PJM's proposal was developed for customers that may not be able to participate as DR today and only have capability to reduce load in the summer.
- Assumption: these are primarily residential customers (which historically do not peak shave on their own to reduce their PLC because they do not reap the benefits of a lower capacity cost when they have a lower PLC).
- PJM previously outlined the expected CBL approach that will be used (A and B (control) groups).
- If there are other customer segments that participate in peak shaving, PJM may need to create new CBLs to more accurately predict customer usage (for example, if a customer historically always reduces load on the peak days, we will need to factor that into the CBL process).

Pros

- ❖ Better alignment or load forecast adjustment with customer performance evaluation
- ❖ Robust existing Economic CBL rules that allow new CBLs to be created and improve accuracy over time

Cons

- More complicated and new CBLs may need to be created for customers that already peak shave
- Potential for double counting, if customers that peak shave and have 0 PLC also look to receive benefit of load forecast adjustment

Pros

- ❖ Consistent with existing DR and PRD M&V rules, avoids double counting (if customer peak shaved in prior year and lowered the PLC, then load reduction is measured against lower PLC value)
- ❖ Simple; one number represents customer expected load on every hour of every day

Cons

- Load forecast adjustment likely not aligned with customer performance measurement. Load reduction estimate too high if PLC is higher than expected load for the hour, too low if PLC is lower than expected load for the hour (especially true for highly weather sensitive load, such as residential AC programs).

Customer may participate in State peak shaving programs and also be included in load forecast adjustment (LFA). Customer in LFA may not also participate as DR (Load Management or Economic DR) or PRD.

Question: Why can't a customer participate in DR (Load management) and be a capacity resource on the supply side while also receiving the benefit of lowering the forecast used to determine the amount of capacity purchased on the demand side?

Answer: If the load forecast has already been reduced for the customer, then there are not additional MWs available when needed as a supply resource.

Question: Is it feasible to receive credits for Incremental MWs?

Answer:

1. Depending on M&V method (CBL vs PLC), this runs the risk of double counting, as customer may get benefit of capacity credit from supply side **AND** PJM buys less capacity for the customer.
2. If this can somehow be figured out, the question remains as to how to determine the allocation of the associated potential non-performance between LFA and DR, which gets further complicated if this involves two different members. Further, there may be inappropriate incentives to arbitrage CP penalties vs LFA non-performance.

PJM believes:

- PJM's proposal has necessary components to accommodate original issue
- The best course of action is to focus on a load forecast adjustment which reflects the changing behavior of former DR programs (now peak shaving programs)
- This approach will help improve load forecast accuracy