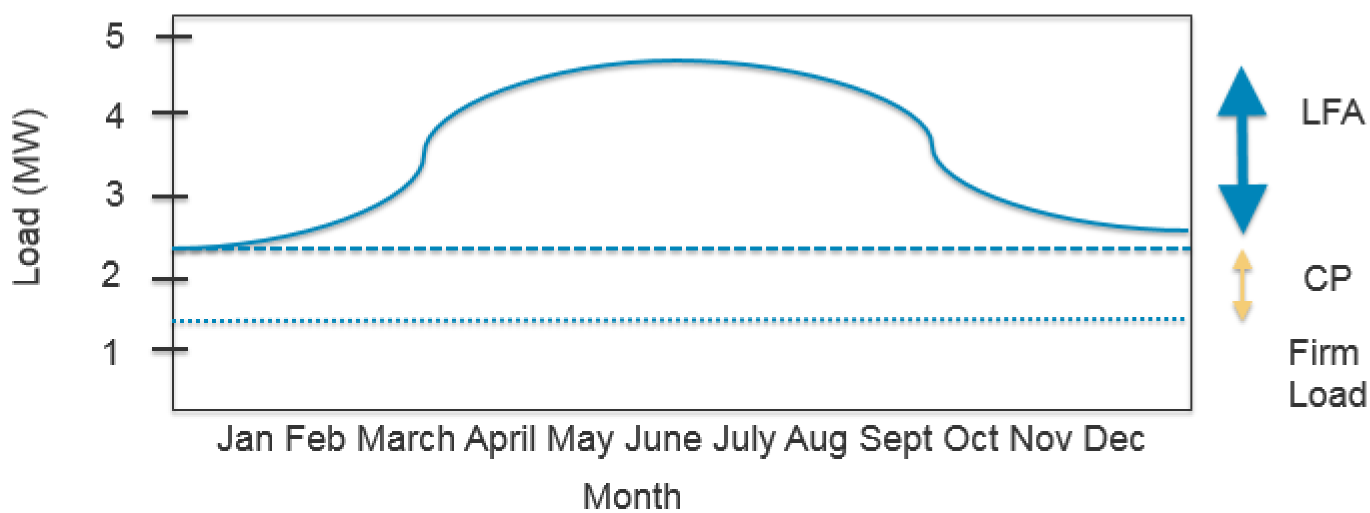
ENERNOC
An Enel Group Company

Executive Summary for Package D – August 15, 2018

Background

Thousands of PJM end-use customers participate in Demand Response programs. Customers in Capacity Performance DR, formally "Emergency Load Response Program" (ELRP), must be available year-round to curtail in the event of an emergency. The CP reduction amount is consistent year-round. However, many customers have additional loads that hit their peak in the summer when the grid is most strained. To help reduce costs among all ratepayers, customers with large summer peaks often participate in state peak shaving programs, such as Act 129 in Pennsylvania, along with PJM's CP. Under Proposal A, PJM's Proposal, customers would be unreasonably forced to decide to participate in either capacity programs, or the new Load Forecast Adjustment. Proposal D more accurately integrates state peak shaving programs, improves load forecasting, and overall, increases reliability.

Proposal D Example Customer Load: MW Curtailments under CP and LFA



Overview

Proposal D recognizes the important work done by PJM and stakeholders. Proposal D has most components in common with Proposal A (PJM) but varies in several important areas:

- Eligibility
- Safeguards
- Curtailment Trigger
- Program Administrator
- Timeline and Applicable Auctions

Key Areas of Difference

Eligibility

Proposal A prohibits a customer from participating in both CP and LFA. Under Proposal D, a customer can participate as **both** wholesale DR and Load Forecast Adjustment, so long as the curtailment is **cumulative** from a reliability perspective, and not double counting, nor mixing the source of the curtailments.

Safeguards

An M&V process will be in force to demonstrate the MWs that are registered as ELRP are not the same MWs that are registered as LFA. In the case of an event, this M&V process will clearly capture that the source of curtailment is the resource originally identified as ELRP or LFA. If ELRP and LFA events are simultaneous, this M&V process will also demonstrate the cumulative nature of the reductions.

After year 1, PJM will add-back any historic LFA curtailments into the unrestricted peak load forecast. As a result, any load reductions via LFA will not be factored into the forecast until a modified load history is developed that assumes anticipated curtailment behavior. This builds off existing processes for wholesale DR add-backs.

If an LFA curtailment and ELRP event occur simultaneously, LFA compliance occurs first and then ELRP compliance. Only the ELRP customer MWs are eligible for the wholesale emergency energy payment. LFA-curtailment events are not paid wholesale emergency or economic energy payments.

Curtailment Trigger

PJM has found that THI is the ideal trigger under current models in most LDAs. However, certain states have historically used day-ahead load forecast as the trigger to their peak shaving programs, which is currently written into their state Tariffs. Proposal D acknowledges that so long as PJM can model a trigger, it should be accepted as LFA-compliant. This may mean that triggers other than THI are granted inferior MWs of LFA, but at least it is providing some value to ratepayers. PJM should also enshrine this flexibility so that in the future if conditions change, new triggers that effectively predict peak load can be developed.

Program Administrator

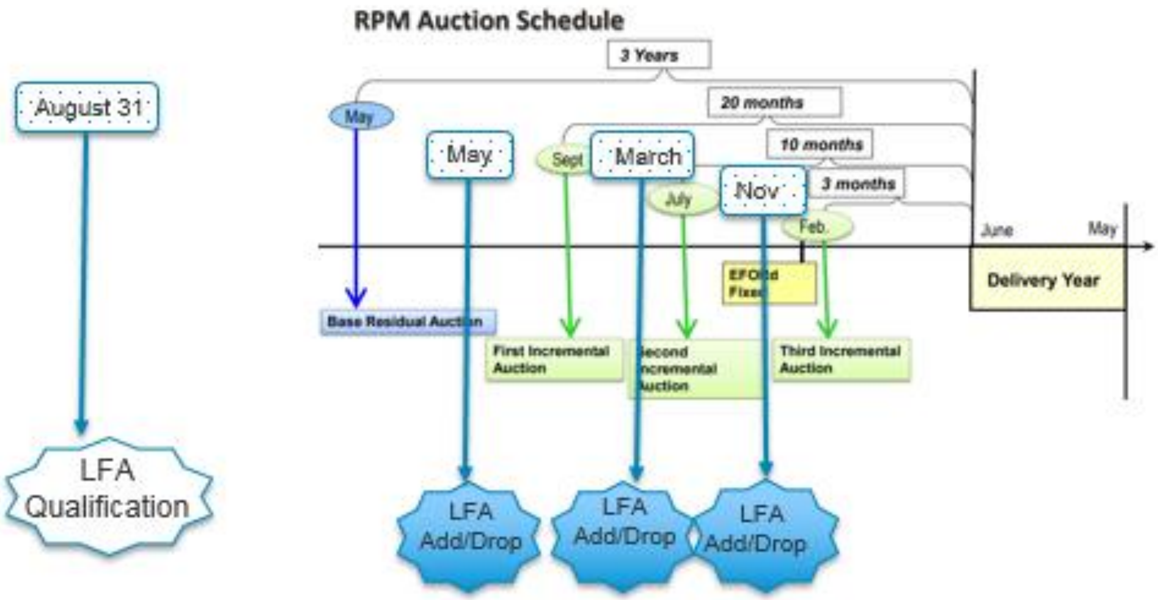
Proposal A arbitrarily limits Program Administrators to only EDCs. Proposal D recognizes that states have the jurisdiction to determine who will manage LFA programs in their state via a RERRA Tariff or

Order. PJM should work with stakeholders to create standard terms for LFA qualification (such as the duration of programs, customer account numbers, etc) that can be followed across states. While EDCs are certainly capable, individual states may decide to also instruct an LSE, CSP or other entity to implement programs.

Timeline and Applicable Auctions

Under Proposal D, Load Forecast Adjustments can be made in BRAs and Incremental Auctions to adjust LFA MWs based on realities. Proposal A requests states to submit LFA by August 31st prior to the BRA. This is almost four years ahead of a Delivery Year and unreasonably limiting. States and customers do not plan peak shaving activities this far ahead usually. PJM has superior mechanisms now in place to "right-size" the PJM mix of resources to the updated load forecast closer to the Delivery Year: PJM's current planning process includes re-publishing the load forecast each year and conducting three Incremental Auctions between the BRA and Delivery Year. These allow PJM to procure more resources when the load is forecasted to be greater than anticipated, or to procure fewer resources when the load is forecasted to be less than anticipated and this can vary by zone. PJM should accept LFA "Add/Drops" (both, additional LFA and reductions in LFA) prior to each Incremental Auction as part of its regular planning process.

Proposal D Updated Timeline with LFA Add/Drop



Original image source: PJM