

# Price Responsive Demand: Treatment of Customer Switching



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- LSE will be required to register price responsive load in a PJM software application to meet the Nominated PRD Value committed.
- LSE needs to separate customers participating in PRD from other customers being served by the LSE.
- LSE has the obligation to meet both the PRD Commitment and Maximum Emergency Event Compliance or incur the appropriate penalties.
- LSE receives the PRD Credit associated with the Nominated PRD Value of the PRD customers being served.
- LSE may transfer all or part of the PRD obligation to another market participant anytime.



- PRD Provider will be required to register price responsive load in a PJM software application to meet the Nominated PRD Value committed.
- The customers participating in PRD and registered by the PRD Provider may be served by multiple LSEs. LSE needs to be identified for each customer in the registration.
- PRD Provider has the obligation to meet both the PRD Commitment and Maximum Emergency Event Compliance or incur the appropriate penalties.
- Each LSE receives the PRD Credit associated with the Nominated PRD Value of the PRD customers being served by the LSE.
- PRD Provider may transfer all or part of the PRD obligation to another market participant anytime.



### Customers Switching Example

- LSE A serves 300 MW load with 200 MW MESL and 100 MW Nominated PRD Value.
   LSE A registers 100,000 customers each with 1 kW Nominated PRD Value to meet the obligation. LSE A receives PRD Credit based on 100 MW PRD. During the Delivery Year, 20,000 customers (20 MW Nominated PRD Value) switch to LSE B.
- Scenario 1: The customers switching to LSE B continue to participate in LSE A PRD program. LSE A keeps the 20,000 customers in the PRD registration to continue to meet the full PRD obligation. LSE B receives PRD Credit based on 20 MW PRD. LSE A receives PRD Credit based on 80 MW PRD.
- Scenario 2: The customer switching to LSE B discontinue participation in LSE A PRD program. LSE A terminates the 20,000 customers in PRD registration and registers new customers to meet the full PRD obligation. LSE A continues to receive PRD Credit based on 100 MW PRD.
- Scenario 3: The customers switching to LSE B discontinue participation in LSE A PRD program. LSE A transfers 20 MW PRD obligation to LSE B bilaterally. LSE B registers new customers or switched customers that are participating in LSE B PRD program to meet the 20 MW PRD obligation. LSA A and LSE B receive PRD Credit based on 80 MW and 20 MW PRD, respectively.



## Slides Previously Presented



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#### No change in the LSE UCAP Obligation Process

EDC\* allocates the prior summer's Zonal Summer Weather Normalized Peak to end-use customers and produces PLCs ("capacity tickets") for the DY

\*If PRD is located in wholesale area, muni/coop is expected to calculate the PLC for end-use customer in their wholesale area for use in the PRD registration process. EDC uploads the obligation peak load for wholesale areas in zone by December 31 prior to DY in the eRPM system

education beak loads (i.e., sum of an LSE's customers' PLCs) for retail area in zone in eRPM system during DY

XML uploads submitted at least 36 hours prior to start of delivery day

PJM calculates daily LSE UCAP Obligation in eRPM during DY



## Use of PLCs in Obligation & PRD Registration Processes

LSE with PRD\*
reduces load to
MESL during Max
Emergency Event
(Summer Prior to
DY)

\*If there is PRD committed during summer prior to DY

PJM produces load drop estimates (addbacks), Zonal Summer Weather Normalized Peaks, and PJM 5 CPs for Summer Prior to DY Summer Weather
Normalized Peak to enduse customers and produces PLCs ("capacity tickets") for the DY

Obligation Process

EDC uploads LSE obligation peak loads (i.e., sum of an LSE customers' PLCs) in eRPM

PJM calculates daily LSE UCAP
Obligation in eRPM

PRD Registration Process

PRD Provider registers enduse customer for the DY (includes PLC and MESL).

EDC goes through normal registration verification process (check PLC, etc) and adds
PNODE

PJM calculates LSE's actual Daily Nominal PRD Value in Subzone/Zone based on registration in eLRS.



### PRD Commitment Compliance Process

PJM calculates Daily Nominal PRD Value for each LSE PRD Registration.

Nominal PRD Value = Expected Peak Load – MESL

Expected Peak Load = PLC \*
Zonal Peak Load Forecast
Scaling Factor

Zonal Peak Load Forecast Scaling Factor = DY Final Zonal Peak Load Forecast/Zonal Summer Weather Normalized Peak for summer prior to DY PJM aggregates the Daily Nominal PRD values for all PRD Provider PRD registrations in a Subzone/Zone to calculate LSE's Daily Nominal PRD Value in Subzone/Zone.

PJM compares PRD
Provider 's Daily Nominal
PRD Value in Subzone/Zone to PRD
Provider 's Committed
Nominal PRD Value in
Sub-zone/Zone

If LSE's Daily Nominal
PRD Value < Daily
Committed PRD Value,
LSE will be assessed a
Daily PRD Commitment
Penalty