



Education Session on PLCs, NSPLs, and THEOs

October 23, 2013

- An estimate of the load contribution of a retail or wholesale load to the RTO summer peak
- Used to develop the capacity obligation of the load
- Determined by the host EDC, using methods that were approved by state regulators
- In general, PLCs are based on the load at the time of the five highest RTO daily peaks of the summer
- The average share across the 5CPs is then applied to the zone's weather-normalized RTO-coincident peak for the summer to derive the PLC
- The weather-normalized coincident peak is determined by PJM and serves as the total load that the EDC must allocate across all load in the zone

- The 5CP method was developed by the Load Analysis Subcommittee in 1998, as a method for allocating a weather-normalized PJM peak to the various zones. In 1999, the Customer Choice Users Group picked up the 5CP method as a way to allocate a zone's normalized peak to each customer/wholesale load, and it was written into the approved rules for retail choice in many jurisdictions. Note: since PJM adopted its own load forecast model in 2006, PJM no longer uses the 5CPs for any internal purpose; PJM identifies and publishes them solely for the EDCs to use in their PLC processes.

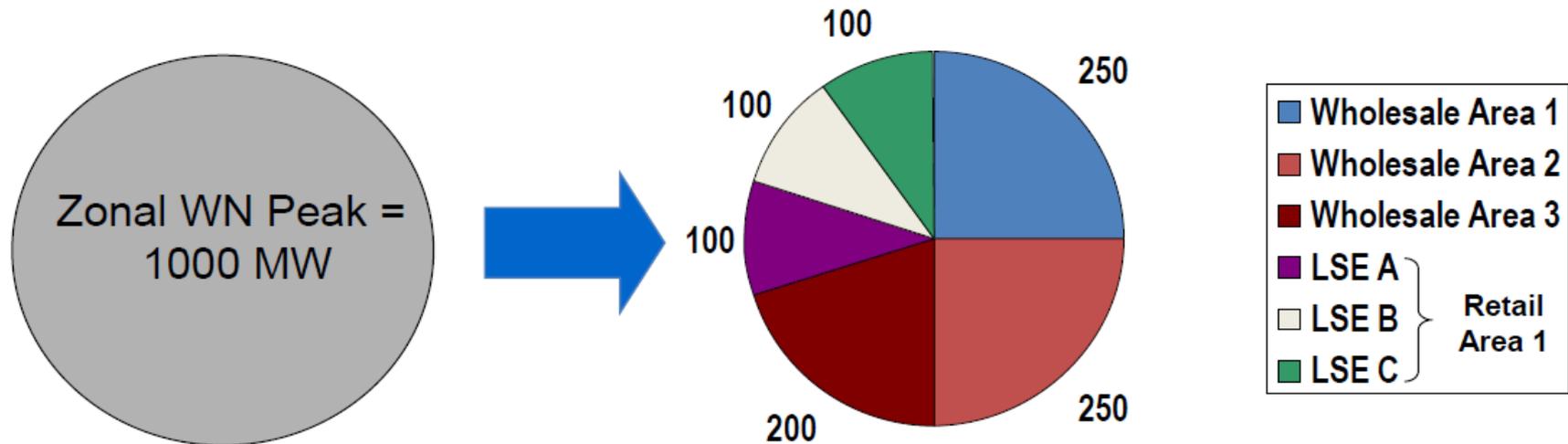
- The EDC uploads the daily PLC for the entire zone, broken down by load share, for each LSE. If the EDC's entire daily upload file for the zone does not equal the total forecasted load for the zone then a Daily Zonal Scaling Factor (DZSF) adjusts all loads submitted by the EDC to make the upload equal the zonal total. If their entire upload file does equal the total forecasted load for the zone then the DZSF factor equals 1.0.
- eRPM then takes the PLC and multiplies it by the DZSF to calculate the Obligation Peak Load (OPL).
- Then the OPL is multiplied by the Forecast Pool Requirement (FPR) and the Final RPM Zonal Scaling Factor (FRZSF) to calculate the Daily Unforced Capacity Obligation (DUCO).

- $PLC * DZSF = OPL$

- $OPL * FPR * FRZSF = DUCO$

- Each PJM Electric Distribution Company (EDC) is responsible for allocating the previous summer's weather normalized peak to end-use customers in the zone (both retail and wholesale) by Dec. 31 prior to the start of the Delivery Year.

Often referred to as a "PLC" or "capacity ticketing" process.



•Obligation Peak Load allocation for a zone/area is constant and effective for the entire Delivery Year.

- Load's contribution to a zone's metered annual peak load, as estimated by the zone's EDC – the single highest transmission peak load
- Determined by the host EDC, using methods that were approved by state regulators

Network Service Charge = Daily Network Service Peak Load in applicable Zone * Network Zonal Rate

- Used to determine network transmission charges to LSEs
- Used to allocate network service FTRs/ARRs to LSEs
- Used to determine ICTR Credits to LSEs for Required Transmission Enhancements
- Used to determine market charge allocations Reactive Supply
- Used to determine market charge allocations Black Start
- Used to determine market charge allocations Transmission Enhancement
- Used to determine market charge allocations Generation De-activation

- RT Load MWh values, inclusive of losses, submitted to PJM via InSchedules

- Setup of who controls the submission of a given RT Load MWh to PJM, is a mutual selection which the two parties (LSE as the Seller and EDC as the Buyer) make when they mutually create & confirm the given Load contract in InSchedules
- Contracts may be established with dual or unilateral Schedule confirmation. Under a dual Contract, all schedules must be confirmed by both parties. Under a unilateral Contract, one party (either the buyer or the seller) is given confirmation rights to all energy schedules between the parties.

Questions?