

NSPL Daily Zonal Scaling Factors – Rounding Issues

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Problem Statement / Issue Charge

- Peak Load Contributions (PLC)
 - PJM requires that the sum of the daily PLC values submitted by the EDCs for each zone equate to the zonal target.
 - This sum can vary on a day-to-day basis due to retail customer attrition.
 - Daily Peak Load Contributions (PLC) data is currently scaled by eRPM to achieve a balance with the set zonal target.



Problem Statement / Issue Charge

- Network Service Peak Load (NSPL)
 - A similar requirement exists for NSPL values submitted daily by the EDCs.
 - eRPM does not apply a daily zonal scaling factor.
 - EDCs are responsible for ensuring that daily totals match the zonal target.
- The inconsistency in handling these data values leads to confusion and potential misuse of data.



- **p**jm
 - Implement NSPL data scaling in a similar manner that PLC values are scaled in eRPM.
 - No mandatory requirement to submit unscaled values
 - Add flag to Daily Zonal Scaling Factors Posting to identify whether EDC submits scaled or unscaled values.

- Requires code changes to eRPM
 - Implement scaling to meet zonal target on a daily basis



Redline Manual 27 changes

- 5.2 Network Integration Transmission Service Charges
 - The daily sum of all LSEs' Network Service Peak Load contributions including losses in a zone/area must equal the EDC's Network Service Peak Load allocation in the zone/area.
 - A Network Service Peak Load Scaling Factor will be used to scale the uploaded LSE Network Service Peak Load values to the fixed Network Service Peak Load Allocation of the zone/area in the event that the Network Service Peak Load values uploaded by the EDC do not exactly sum to the Annual Network Service Peak Load Allocation for the zone/area.

 $DailyNtwkSvcPkLoadScalingFactor = \frac{Annual Zone Area Network Service Peak Load Allocation}{\sum Zone Area Network Service Peak Load Uploads}$



- NSPL data
 - Daily ARR reassignments
 - Used in other settlement calculations
- Strong requirement to maintain NSPL precision of 0.1 MW
 - Minimize additional settlement complexity
 - Code changes
 - Database modifications



Rounding Issues

- Using 0.1 MW precision will require rounding that can result in the sum of the individual values not equaling the zonal total
- Residual MW as a result of rounding expected to be < 0.4 MW
- Solution options:
 - 1. Assign any residual MW to the largest individual NSPL within a zone
 - Break any tie by assigning residual MW to LSE shortname that is alphabetically first
 - 2. EDC identifies a specific LSE to assign any residual MW
 - 3. Other suggested solutions