



Actual meter data for Initials and State Estimator load value tolerance

Nebraska Public Power District

Ronald Thompson
Energy Manager
Nebraska Public Power District
March 18, 2020



Nebraska Public Power District

Always there when you need us

Concern – SPP allows Entities to use Schedules for Initial Settlements

- SPP allows Entities to use schedules or estimated values for Initial Settlements
 - If AO doesn't send values to SPP for initials SE load values are used
 - No checks or validations if actuals/schedules are in tolerance or comparable to State Estimator Load numbers
 - State Estimator loads are used to determine SE losses
- Thus in Areas when the Settlement Location uses a Top Down process to determine its load the SPP Market
 - Load numbers are not 100% correct
 - SE Losses maybe incorrect and never get re calculated when actual data is submitted
 - Impacts Load forecasting with the Settlement location with Top Down losses are determine
- With the Settlements going to 120 days for Final this issue is compounded

Impacts

- Entities are paying more or less than is needed during the initial period
- At times find the estimated/Scheduled amounts quite a bit different than actuals
- Financials are adjusted after 120 days but at times carrying a large amount before this occurs
- Impacts Meter Calibration numbers and creates work
- Losses are incorrect and that impacts load Forecasting

What is NPPD and SPP doing today

- NPPD and SPP are researching
 - State Estimator values vs actuals
 - See if can improve loss calculations
 - Black Box – SPP cannot show NPPD everything so NPPD will be looking to reach out to others for their thoughts
 - Seeing differences in the State Estimator Loads and actual for some locations – Why is the question
 - So may points difficult for SPP to monitor
- NPPD is looking through the Pnodes in there Settlement locations to see what areas need to be looked at.

Potential Solution

- Where possible, research using State Estimator values instead of Schedules/Estimates for Initial Settlements
 - Would need to verify and use projected shares of that load at that Pnode (example - SE load values can be % of transformer loads)
- Improves
 - Reduced differences between Initials and Finals
 - Entities Losses closer than using Schedules
 - Improves Meter Calibration issues – reduces work
 - Improvement in Load Forecasting for some

Potential Impacts – SPP Assessment

- Potential System Impacts
 - Scheduling and Settlements
- Potential MCE Performance Impact
 - NA
- Potential Complexity
 - Design: Low
 - Implementation: Low
- Market Philosophy Impacts: Price Formation, Price Convergence, Market Efficiency, Market Transparency, Market Reliability
 - None

Questions?

Stay connected with us.



Nebraska Public Power District

Always there when you need us