ERCOT VOLTAGE PROFILE WORKING GROUP (VPWG)

## April 6, 2017 Report to ROS

### Recent Meeting

* + - VPWG had a meeting on March 7, 2017. Session #1, joint meeting with QSE/RE. Session #2, TSP only meeting.

**Session #1 (QSE/RE/TSP)**

* + - TSPs, ERCOT and QSEs discussed the implementation of NPRR776, including the common visibility of the TSP-desired set point and voltage at the POI. ERCOT doesn’t currently have a data type like needed to model Voltage Set Point in the ERCOT EMS, and will need to submit a project to add this to the EMS CIM importer (estimated timeframe- a few months to 1 year). Until ERCOT project goes live, NPRR776 language to be left grey-boxed.
    - The group discussed problems with only 1 POI voltage measurement point per plant. Multiple bus sections at a transmission switching station can be out of service and generation will still flow. The problem is picking the right voltage point for each possible station configuration. If the wrong voltage point is shown for current conditions, common TSP, ERCOT, QSE and Generator voltage observability can either be lost or voltage given for a bus that generation is not currently connected to. TSPs will need to decide how to address the issue. VPWG plans to request an agenda item on the upcoming NDSWG agenda to further discussion of possible schemes or EMS logic to solve this.
    - QSE/REs commented that Voltage Set Points from 2016-2017 winter/spring looked reasonable.

**Session #2 (TSP)**

* + - ERCOT presented a multi-year analysis on which “Lowest Load” to use in our upcoming fall test case. The group decided to use the lowest “Average of Daily Minimums - Standard Deviation” from any of the past four years. The value was 25 GW.
* Kicked off the Summer-Fall Voltage Profile study process.
* Results of 50 GW winter peak voltage profile test case will be discussed next time.

### Future Planned Meeting

* Next VPWG will be held on April 4, 2017.

Scot Williams Sharmila Gurrala

VPWG Chair VPWG Vice-Chair