FERC Technical Conference – Managing Transmission Line Ratings – Garrett Crowson (SPP)

• Can RTOs/ISOs currently accept and use a DLR data stream from a transmission owner? What needs to be modified to address any barriers to RTOs/ISOs accepting and using DLR data streams?

SPP currently went live with a project on March 1st, 2019 which allows transmission owners to submit real-time ratings via ICCP which are fed into SPP's EMS system. These ratings are directly used in the real-time power flow (RTNET) and N-1 contingency analysis (RTCA) which is run every 6 minutes.

 How does the implementation of AARs by an RTO/ISO differ from implementation of DLRs? If an RTO/ISO implements the use of AARs in its software and communications capabilities and standards (data formats, internet protocols, cyber security requirements, etc.), what else must it do to implement DLRs?

As an RTO, the implementation of AAR & DLR is carried out on the transmission owner side and is sent over an ICCP link to SPP as the RC, therefore there is no difference to SPP from the RTO perspective. This means, for the RTO, there would be no additional cyber security requirements for DLR vs. AAR as all the cyber security would apply the same via ICCP link.

What responsibilities, if any, should the RTOs/ISOs have with regard to any verification of values
provided by the transmission owners? How should any disputes regarding disagreements of values
between the transmission owner and RTO/ISO be resolved?

The SPP modeling process for requesting the setup of a real-time fed ICCP rating requires the transmission owner to also send a set of "reasonability limits" which are used to effectively cap erroneous data on both upper and lower bounds. Also, stale data points are handled similarly to SCADA MWs in EMS, in that if the data is stale, or of bad quality, for a predefined amount of time, the logic reverts back to seasonally submitted static limits. This logic was presented and endorsed by stakeholders via the Operating Reliability Working Group (ORWG) to help prevent any misunderstanding and disputes.

 If DLRs or AARs were adopted, what if any additional coordination might be necessary? For instance, coordination across RTO/ISO seams, across transmission owner seams, or within or between reliability coordinators.

Currently for SPP, the modeling process requires that any joint owned asset be approved by all asset owners in order to model a real-time fed rating. SPP has also expressed willingness to provide ICCP ratings back to any entities which the transmission owner approves of, as a sort of feed through ICCP data point.