WIRAB Staff Comments to WECC on the Draft Anchor Data Set Workflow

May 16, 2017

The Western Interconnection Regional Advisory Body (WIRAB) staff appreciates the opportunity to provide comments to the Western Electricity Coordinating Council (WECC) on the Draft Anchor Data Set (ADS) Workflow based on the flow diagram dated April 11, 2017 and an informational webinar held April 26, 2017.

The ADS is a new initiative to build a common data set for the Western Interconnection in coordination with WECC, the Western Planning Regions (WPR), and entities defined as Data Submitters in the Workflow process (Planning Coordinators, Transmission Providers, and Balancing Area Authorities). As proposed by the Joint PCC-TEPPC Review Task Force (JPTRTF) and approved by the WECC Board of Directors in December 2016, the "ADS is a compilation of load, resource, and transmission topology information used by the Western Planning Regions (WPR) in their regional transmission plans as well as by other stakeholders in various planning analyses. Data included in the ADS is compatible with production cost models (PCM) and power flow (PF) models, including dynamic data and associated assumptions."[1]

WIRAB staff believes the current draft ADS Workflow is a good start in building a consistent process for gathering planning data for use in planning models such as PCM and PF models. The ADS will assist the WPRs in developing regional plans to meet their obligations under FERC Order 1000. With proper vetting and stakeholder review, the ADS could enable WECC to perform better reliability assessments of the Western Interconnection through the integrated use of PCM and PF models. WIRAB makes the following recommendations and observations for WECC in revising the draft ADS Workflow process.

1. Expand and clarify the opportunities for posting of data and soliciting stakeholder review during the Workflow process. Under the current draft Workflow, the first posting of the combined data sources that make up the ADS occurs just after step 6, and again after step 9. After step 6, the draft Workflow provides that "No further changes can be made to the transmission topology, resources, or RPS compliant PF Case." WECC's Reliability Assessment Committee will only provide a process check near the end at step 10. We recommend that the ADS Workflow add in a preliminary check-in spot with posting of data and stakeholder review at step 4. Step 4 aggregates data from the four WPRs and a large number of Data Submitters to create an Interconnection-wide data set for use in PCM and PF models. A step 4 review would serve to correct potential errors copying, transferring, and merging electronic data among a large number of entities. Additionally, the draft data could be compared to existing data sets to help identify if there are significant outliers that require a closer look. The purpose of the step 4 review is to correct errors that may happen when multiple entities contribute large streams of data into a common database. This check should be done prior to step 6 which is a point too late in the process for correcting errors.

[1] Joint PCC-TEPPC Review Task Force (JPTRTF) Submitted to the WECC Board of Directors for Consideration on December 6, 2016. Western Electricity Coordinating Council, page 52.

2. The draft Workflow document contains three points in the Workflow process for "WPR Data Submitter Coordination" in blocks B, E, and J. It is not clear what this step requires for either the four WPR entities or the much larger number of Data Submitters which include Planning Coordinators, Transmission Providers, and Balancing Authorities. Data Submitters have historically provided WECC with data submissions that are required to meet MOD -032 reliability standards. Vague notions to coordinate could lead to gaps in data because of miscommunication or misunderstanding of roles and responsibilities. To prevent such problems, protocols could be developed that clearly lay out the responsibilities between these entities, and a role for those Data Providers that do not reside in the footprint of one of the four WPRs. Ideally, we hope the ADS will serve to unify the data used to meet the MOD-032 reliability standards and WECC reliability assessments with the data used by WPR for developing transmission plans.

3. As noted in the JPTRTF report, ADS data is comprised of four primary types of data: (1) existing, planned and retired data for transmission topology in the year 10 planning horizon; (2) existing, planned and retired resources (generators) in the year 10 planning horizon; (3) load forecasts in the year 10 planning horizon; and (4) other data needed for planning studies (e.g., start up times, variable O&M costs, emissions costs, etc.). We anticipate and expect that the ADS process will clear up and resolve any outstanding issues about data for the existing resource and transmission topology. We are less certain that the WPR assumptions about planned year 10 resources, loads and transmission topology will be universally accepted by other stakeholders in the Western Interconnection, including states, provinces and their respective regulatory commissions. For this reason, we agree with the JPTRTF report that the ADS will "[e]stablish a common foundation for uses of load, resource and transmission topology data to be used by WECC . . . ."[2] And this foundation can serve as a starting point that can be modified in the 10-year planning horizon data set for other PCM, PF and 20-year studies.[3]

4. We expect that WECC will continue to act as an unbiased and reliable source of information for all stakeholders. WECC's self-described role is to be the reliability assurer of the Western Interconnection. In this capacity, WECC's Reliability Assessment Committee will perform reliability assessments on the bulk power system using both PCM and PF modeling tools. WECC can use the ADS as a starting point for reliability assessments. However, WECC needs to be prepared to create its own 10-year expected future case if it determines that the ADS is not the best representation of the power system 10 years in the future. WECC should view the ADS as a starting point to build its own version of the expected future in developing stakeholder vetted and high quality reliability assessments.

[2] JPTRTF, p. 52
[3] JPTRTF, p. 52