Western Energy Imbalance Market — Regional Issues Forum

Meeting Summary of March 11, 2019

Introductions & RIF Business:

- The RIF liaison Officers Presiding:
 - o Therese Hampton (Public Generating Pool), Chair
 - o Suzanne Cooper (Bonneville Power Administration), Secretary
- A quorum of liaisons was not present, but Therese noted that there were no decisions in front of the RIF at today so the meeting would proceed
- The next RIF meetings will be held on (1) June 26, 2019, in Folsom, California; (2) August 27, 2019, in Portland, Oregon; and (3) December 3, 2019, in Las Vegas, Nevada. All of these meetings will be held the day prior to scheduled EIM Governing body meetings.
 - All meeting agendas and presentation materials may be found at https://www.westerneim.com/Pages/Governance/RegionalIssuesForum.aspx

Topics Discussed

- 1. Public Service Company of New Mexico (PNM)—decision to join the Western EIM (presentation provided)
 - E3 estimates EIM benefits for PNM to be in the range of \$17 \$21M per year
 - Utilicast estimates EIM costs to be (1) \$20.9M capital; (2) \$7.4M up-front start-up cost includes initial operations and maintenance; and (3) \$2.9 \$3.9M on-going operations and maintenance per year thereafter
 - PNM's transmission connections on the west side of its Balancing Authority Area (BAA) are stronger than on the east, and this was a significant factor in PNM's decision. PNM looked at the SPP model as well CAISO and due to transmission connectivity, PNM decided to pursue discussions with CAISO.
 - The wind development is in the east side and there is one 345kV connection with 1000MW capability that would be served to meet the new legislation that passed to 50% carbon free by 2030, 80% by 2040, and 100% by 2040.
 - EIM Transfer Capability ranges from 2,000MW export 750MW import (approx.) split between connections to CAISO, Arizona Public Service, Salt River Project, and possibly with those that are connected at Palo Verde.
 - EIM efforts halted at present due to pending approval from the New Mexico Public Regulation Commission on PNM's establishment of a regulatory asset for EIM implementation expenses. PNM estimates they can maintain their schedule provided the Commission decides by the end of March 2019.
- 2. Energy Transfer System Resource (ETSR) Best Practice Discussion (presentations provided)
 - General:
 - ETSRs connect EIM BAAs via direct or intermediary transmission service providers, and allow for the transfer of energy between them—thus allowing inter-regional transactions that create the majority of EIM benefits for the participants.

 ETSRs may be established through the rights-holder (relying on the donation of point-to-point transmission rights to be optimized by the EIM in real-time) or ATC methodology (relying on flow-based transmission capacity to support the real-time transfers).

PacifiCorp:

- o ESTR implementation is complex—many details to work through
- New EIM Entities should consider they are not only entering into an agreement with CAISO, but also all other adjacent EIM Entities
- Consideration should be both to design and operational aspects of establishing ESTRs
- o Differences in EIM Entity and vendor implementation options can cause seams
- Operator actions can have significant impacts on not just their own BAA, but the adjacent EIM Entity BAA.

Puget Sound Energy (PSE):

- PSE has created unique relationship with Bonneville Power Administration
 Transmission (BPA) given they are 3rd party transmission provider to enable its
 ETSRs with PowerEx and PacifiCorp.
- PSE working to establish additional ETSRs with Portland General Electric, Idaho Power, and the CAISO—also requiring close coordination with BPA as certain of these paths have had substantial seasonal congestion.

Arizona Public Service (APS):

- Experienced several operational challenges as an EIM Entity that facilitates many wheel-through activities.
- APS has to coordinate closely with CAISO to develop solutions that limit its exposure to large swings in net import/export quantities which can create difficulty managing the real-time ramping demands.
- APS has established a threshold, currently set at 500MW of rate of change, to block EIM transactions between EIM BAAs to preserve the system stability and system reliability.

3. Organized Market Governance Models (presentation provided)

- Ron Binz—former Colorado PUC Chair
 - o Review of governance models at each organized market in North America
 - Thoughts on impediments to market evolution in the West—shortcomings of previous and current efforts
- Jennifer Gardner—Western Resource Advocates
 - o Discussion of the significance of regional system/transmission operator governance, with a focus on stakeholder processes
 - Suggestion that Regional Issues Forum take a more formal role in CAISO stakeholder process
- Steve Beuning—VP of Power Supply at Holy Cross Energy
 - Expressed his views of effective organized market governance; specifically how a
 governing body's fiduciary responsibilities will guide its priorities, i.e. pursuing "low
 rates" may impact ability to deliver an optimal market design

 Short-term vs. intermediate goals can impact how efficient and reliable a market design will be and how successful it will be in delivering the greatest long-term benefits to entities involved.

4. EIM Governing Body Update

- Chair Valerie Fong gave a brief update on past and future EIM Governing Body activities, including a preview of the discussion with the EIM Governing Body scheduled for the next day to discuss minor revisions to the EIM decisional classification rules and next steps in the EIM Governance review.
- Chair Fong stated there will be a presentation by CAISO on the plan for the long term governance at tomorrow's scheduled EIM Governing Body meeting, and EIM Governing Body Members need to report to the ISO Governing Board on the effectiveness of the EIM Governing Body by Sep. 2020.