Western Energy Imbalance Market — Regional Issues Forum

Meeting Summary of March 9, 2018

Administrative:

- The RIF liaison Officers Presiding:
  - Cameron Yourkowski (Renewables Northwest), Chair
  - Therese Hampton (Public Generating Pool), Vice Chair
  - Matt Lecar (Pacific Gas & Electric), Secretary
- A quorum of liaisons was confirmed present
- EIM Governing Body Members present: Fong, Prescott, Schmidt
- The next RIF meeting will be held on June 6th, in Portland Oregon
  - All meeting agendas and presentation materials may be found at https://www.westerneim.com/Pages/Governance/RegionalIssuesForum.aspx

Panel 1— CAISO Day Ahead Market Enhancements and EIM

- Presenting DAME Initiative (Don Tretheway, CAISO)
  - CAISO proposed improvements to the Day Ahead market, with the following objectives:
    - Introducing a Must Offer Obligation in Real Time to better meet forecasts
    - Better positioning the Day Ahead to cover uncertainty in net load forecasts
  - At present, the Day Ahead Market runs the IFM and RUC processes in sequential order
  - Shortcomings of the current IFM and RUC sequential processes.
    - Hourly granularity is poorly suited to increased uncertainty from renewables
    - RUC can clear the market when the prior IFM run results in a net short supply of CAISO Forecast of CAISO Demand (CFCD), but is unable to de-commit units if IFM is long on supply.
  - The CAISO proposed the following interrelated market improvements:
    - IFM will move from hourly to 15-minute granularity
    - Creation of a DAM Imbalance Reserve Product
    - Integration of IFM and RUC into one simultaneous market optimization
  - Economic bids will better cover the envelope of uncertainty around forecasted intervals
  - CAISO offered the following initiative schedule for 2019 DAME implementation:
    - 4/18/18 Stakeholder Meeting
    - 5/23/18 Stakeholder Meeting
    - 6/19/18 Stakeholder Meeting
    - 7/12/18 Governing Body Advisory Board
    - 7/25/18 Board of Governors Meeting
  - DAME implementation planned for 2019; 2020 Day Ahead Market extension for EIM
  - Scope of DAME's impact on EIM Entities:
    - Resource Adequacy and Resource Planning decisions remain with each EIM BAA
    - Aligning existing Transmission Access Charges (TAC), only standardizing when needed

        - Appropriately allocating Congestion Revenue Rights (CRR) to EIM BAA's
        - Resource Sufficiency Tests to prevent BAA leaning
        - Transferring Bid Ranges bilaterally between BAA's
        - GHG Attribution alignments for Day Ahead market
- EIM Entity Perspective on DAME initiative (Sarah Edmonds, Portland General Electric)
    - EIM entities are committed to increasing incremental value of the EIM while largely avoiding political and practical hurdles of full regionalization.
    - By 2020 two thirds of entities in the WECC will be in EIM
    - EIM's current Real Time character accounts for only 2-3% of all settled load
    - Greater volume resulting from EDAM will increase importance of transmission planning
        - Distances between generation and load, renewables resources combine to make transmission cost allocation increasingly important.
        - Solutions other than a uniform EIM TAC are currently preferred
        - Assigning transmission value properly will incent entities to join EIM
        - EIM entity reporting of transmission availability to CAISO will be critical
    - Resource Sufficiency framework is preferred to a Resource Adequacy design.
    - Voluntary nature of EIM without exit fees is attractive to new participants
        - Maintaining individual BAA control is a popular feature of the current EIM.
    - It will become increasingly necessary to assess whether the EIM Governing Body is appropriately prepared to oversee a large day ahead EIM market.
    - It will be important to acknowledge the role of FERC in this process; a 2009 decision for MISO rejected a market structure controlled by BAA's.
- Discussion:
    - Responding to LADWP:
        - Imbalance Reserve Product will use upward and downward bid categories
        - Non Generator Resources (NGR) may be dispatched into a negative range
    - Responding to Western Resource Advocates (WRA) and Public Generating Pool (PGP):
        - The CAISO will solicit stakeholder feedback regarding how the DAME initiative should be classified from a governance standpoint.
    - Responding to Navigant
        - CAISO will procure its imbalance reserve product as it does ancillary services (AS), by using sub-regions for purposes of deliverability
    - Responding to Constellation:
        - Not necessary that RC services be offered by an entity's market operator

Panel 2 — EIM and Bilateral Market Interactions

- EIM Transmission Allocation & Real-Time Bilateral Markets (Moe Sakkijha, APS)
    - Raised issue regarding the inability to schedule power transactions for the two hours prior to the beginning of an operating hour on the bilateral real -time market, due to:
        - Base schedules for EIM entities are submitted 75 minutes before the operating hour, meaning that trades 30 minutes prior could result in uninstructed imbalance energy charges

        - 55 minutes prior to the operating hour, deviations from forecasted load may be reflected in base schedule adjustments
        - 40 minutes prior, late tag alterations may be made by the BAA
    - Supportive of the 2016 introduction of the 8 hour 'Trough' and 6 hour 'Evening Peak' products within the Western Systems Power Pool (WSPP)
- Discussion:
    - Responding to Turlock Irrigation District:
        - APS would like for non-participating generators to be pseudo-tied out of its BA
        - There are no LSE's within APS' BA, so there is no need to pseudo-tie out any load from its BA
- EIM and Bilateral Market Interactions (Caitlin Liotiris, Western Power Trading Forum)
    - Spoke regarding transmission which is dedicated exclusively for EIM use and how this can be utilized for energy transfer between EIM entities
    - Available Transfer Capability (ATC) can be communicated before the operating hour to serve as the EIM transfer limit between two entities
    - Interchange Rights Holder: Some EIM entities have committed to reserving transfer capacity in order to ensure Market Based Rate (MBR) award from FERC
        - Portland General Electric and Puget Sound Energy (PSE), both committed to setting aside certain minimum transmission capacity specifically for EIM use
- Transmission Options in the EIM and EIM Bilateral Market Interactions (Pam Sporborg, PGE)
    - Offered three potential models of transmission for EIM participants:
        - Interchange Rights Holder
            - A transmission purchaser offers its own reserved firm transmission rights to the EIM as available capacity.
            - This results in a defined quantity of capacity for EIM use
        - Available Transfer Capacity
            - Unscheduled transmission capacity remaining after the customer scheduling window has closed, is available for EIM use.
            - This results in a variable quantity of capacity for EIM use
        - Hybrid of IRH and ATC
            - An EIM entity can use its Open Access Transmission Tariff (OATT) to take advantage of both firm interchange rights and ATC.
    - Participants must account for these factors when trading bilaterally or through the EIM:
        - Transmission availability
        - Price Risk
        - Participating Resources Scheduling Coordinator Workload
        - Transmission Service Provider (TSP)
    - Expects hourly bilateral trading to increase, and that price and volume will become increasingly volatile
    - Hope that CAISO will make technological enhancements to shorten Real-Time timeline
- Discussion
    - Northwestern Energy commented:
        - EIM scheduling deadlines are not compatible with bilateral trading timelines, and bilateral trading hour-ahead has decreased

        - This issue is especially disruptive for VER's
        - EIM entities make fewer trading calls as additional members join
    - Avangrid commented:
    - Prior CAISO suggestions of 'auto-mirror", or 'auto-match' settlement enhancements may help automatically net out upward and downward imbalances that can sometimes be faced by a single EIM entity.

New EIM Entrants Update

- LA's Clean Energy Future (Los Angeles Department of Water and Power)
    - Will coordinate with CAISO to explore potential expansion of Pacific DC Intertie.
    - Reaffirmed GHG goals, stated long-term target of utilizing 100% renewables