ISSUE #5: EIM TRANSMISSION USAGE FOR NETWORK

Step 1: Introduction and Education

• Review of the use of transmission for EIM transfers
• EIM use of BPA’s system today
• Transmission provision for BPA EIM Entity (September ROD)
Transmission Usage Issues for EIM

- BPA’s decision to use the Interchange Rights Holder Methodology applies to transmission needed for BAA to BAA transfers of energy
  - BPA did not develop policies on how transmission can be made available for EIM Transfers
- BPA did not develop policies for transmission products and agreements needed for Participating Resources
Transmission For EIM

- As part of its optimization, the EIM dynamically transfers energy between EIM BAAs using dynamic schedules to meet load and imbalance every 15/5 minutes.
- The EIM requires transmission to be made available to the market to facilitate this transfer of EIM Energy between EIM BAAs.
- Dynamic Schedules are typically used for EIM Transfers.
- Without transmission for EIM transfers the EIM can only optimize the load and resources in an individual BAA instead of across the EIM footprint.
- This lack of transmission for EIM Transfers may result in a less economical dispatch and higher prices for energy in certain BAAs.
- Physical transmission constraints are honored within each EIM BAA.
EIM Transfer Schedules

- The EIM primarily uses dynamic schedules to transfer energy between EIM BAAs.
- One exception is on the COI where separate 15-minute normal/static schedules and 5-minute dynamic schedules are used due to DTC issues.
- The EIM Transfer for an EIM BAA is an algebraic quantity (positive for export and negative for import) for the NET energy exchange between a given BAA and the remaining BAAs in the EIM Area facilitated by the EIM.
- Energy delivered as an EIM Transfer is not tied to specific generation but modeled as an aggregate delivery of power between EIM BAAs.

Energy Transfer System Resources (ETSR)

- System Resources are defined in each EIM BAA to anchor the Energy Transfer schedules from that BAA to other BAAs in the EIM Area for tracking, tagging, and settlement.
  - Analogous to a Source or Sink on an e-Tag

- ETSRs are defined as aggregate system resources at the EIM BAA Default Generation Aggregation Point (DGAP), which is an aggregation of all supply resources in the BAA.

- Each ETSR is defined as either an import or an export resource, and it is associated with an EIM intertie with another EIM BAA, or a CAISO intertie with the CAISO.
EIM Transfers (Real-Time Display)
EIM and BPA Today

- The BPA transmission system is already being used for EIM transfers.
- PacifiCorp, PGE, Puget and Powerex have redirected long-term PTP on the BPA network that they donate to the EIM to facilitate EIM transfers.
- These companies donate transmission from their original reservations on the COI as well.
- BPA has worked with these entities and CAISO over the years to create business rules and operating protocols associated with the use of BPA transmission for EIM transfers.
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Step 2: Description of the Issue

• Transmission issues identified in the ROD
• Additional transmission issues to be addressed
Transmission in Phase III

- BPA’s decision to use the Interchange Rights Holder Methodology applies to transmission needed for BAA to BAA transfers of energy

- This decision doesn’t address issues related to the use of transmission inside the BPA network

- These issues will be addressed as part of Phase III of BPA’s EIM process
Additional Policy Issues Identified in the ROD

- The September 2019 ROD identified three potential policy issues:
  - What, if any, network transmission requirements will there be for resource participation (e.g., designation or tagging requirement)?
  - Which transmission products are eligible for ETSRs (firm, non-firm)?
  - What is the process for transmission donation?
- Staff has developed an objective statement and restated the policy issues since the ROD was released.
Objective

- Adopt transmission-related policies for EIM use of BPA’s network that are non-discriminatory and do not negatively impact reliability and efficient EIM market while mitigating the commercial impacts on BPA’s transmission system and customers.
Phase III Transmission Policy Issues

- Transmission Agreements Required for Participating Resources
  - Issue 1: What type of contract should be required for Participating Resources to ensure they are subject to the terms of the tariff and BPs?
  - Issue 2: What type of transmission reservation, if any, should be required for Participating Resources?
Phase III Transmission Policy Issues

- Policy Issues Related to Transmission Donation
  - Issue 1: Which transmission products should be eligible for customer donations of transmission for EIM transfers?
  - Issue 2: What should the transmission donation process be?
EIM Transmission Next Steps

- Feedback on objective and policy questions
  - Please submit to techforum@bpa.gov (with copy to your account executive) by February 11, 2020.

- Next EIM Transmission workshop: May 20, 2020
  - Step 3: Analysis of the Issue
  - Step 4: Alternatives
EIM Transmission Usage for Network

Questions?