

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

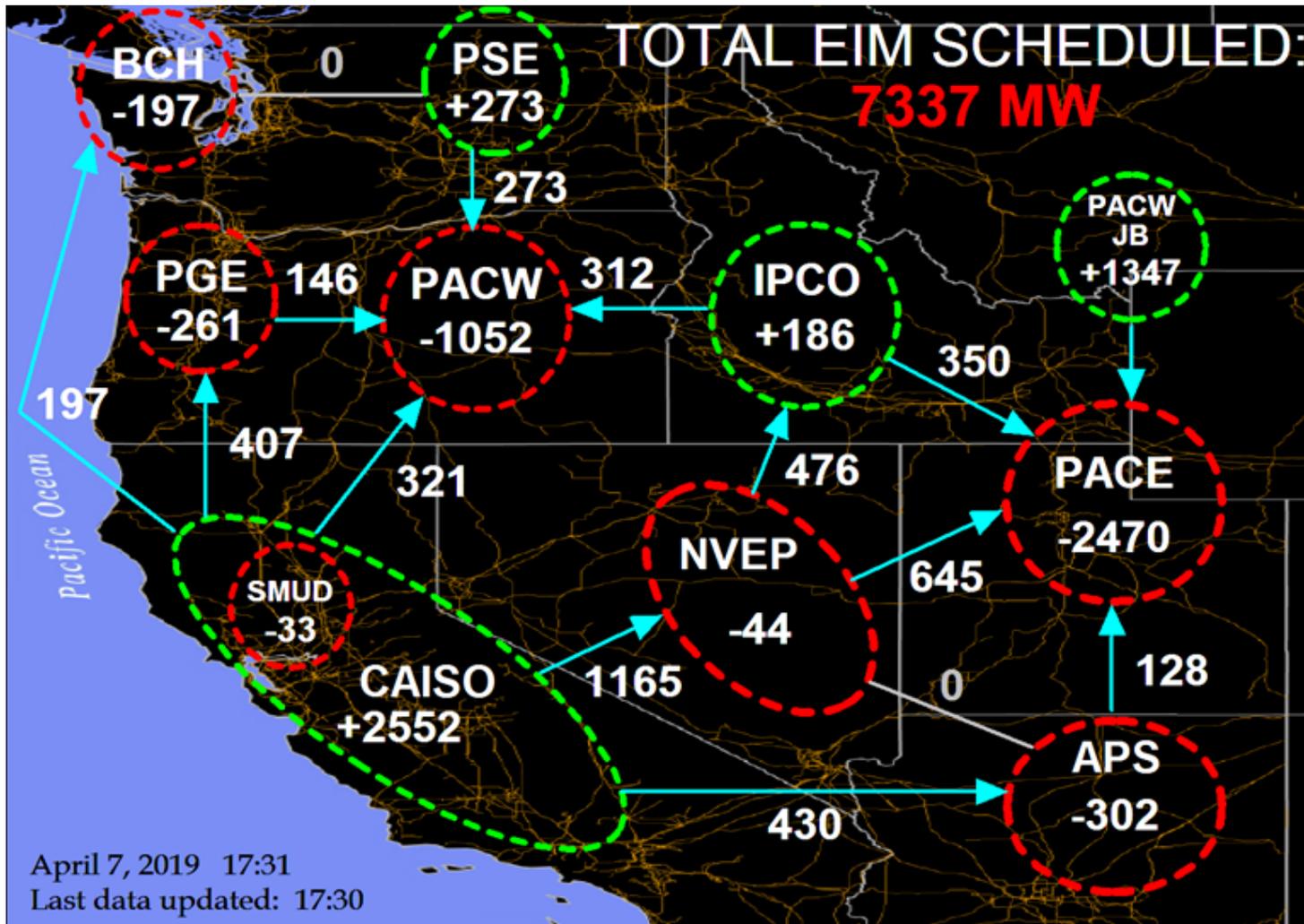
EIM Transfer Schedules

- 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?