

ISSUE #6: NON-FEDERAL GENERATION LOCATED IN THE BPA BAA

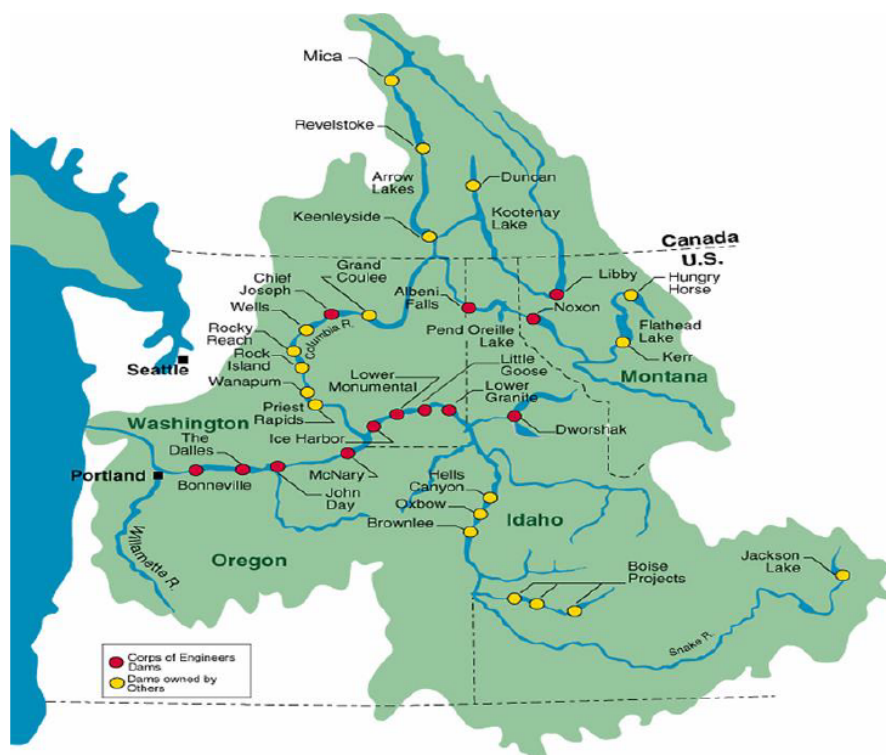
Step 1: Introduction and Education

Step 2: Description of the Issue

ROD and EIM Participation

- As part of Phase III, the ROD states that BPA will address EIM participation requirements for non-FCRPS resources.
- BPA will develop tools and processes for non-FCRPS resources becoming EIM Participating Resources.

Federal Resources



- **Participating Resources:** Grand Coulee, Chief Joseph, McNary, John Day, The Dalles, Bonneville, Lower Granite, Little Goose, Lower Monumental, and Ice Harbor (aka the Big 10).
- **Non-Participating Resources:** Non-Big 10 projects, which include headwater projects, Willamette projects, Palisades, Upper Snake projects, and CGS.

BPA discussed Federal Resources and the EIM in the October 11, 2018 EIM Stakeholder meeting (See link below)

<https://www.bpa.gov/Projects/Initiatives/EIM/Doc/20181011-October-11-2018-EIM-Stakeholder-Mtg.pdf>

Master File Characteristics of Each Resource

Resource Characteristics needed for both EIM Participating Resources and Non-EIM Participating Resources

Resource ID

Start up information

Minimum on/off time

Scheduling Coordinator ID

Ramp rates/heat rates

MSG configurations

Plant type (gas, hydro, etc.)

Greenhouse gas information

Intertie resource information

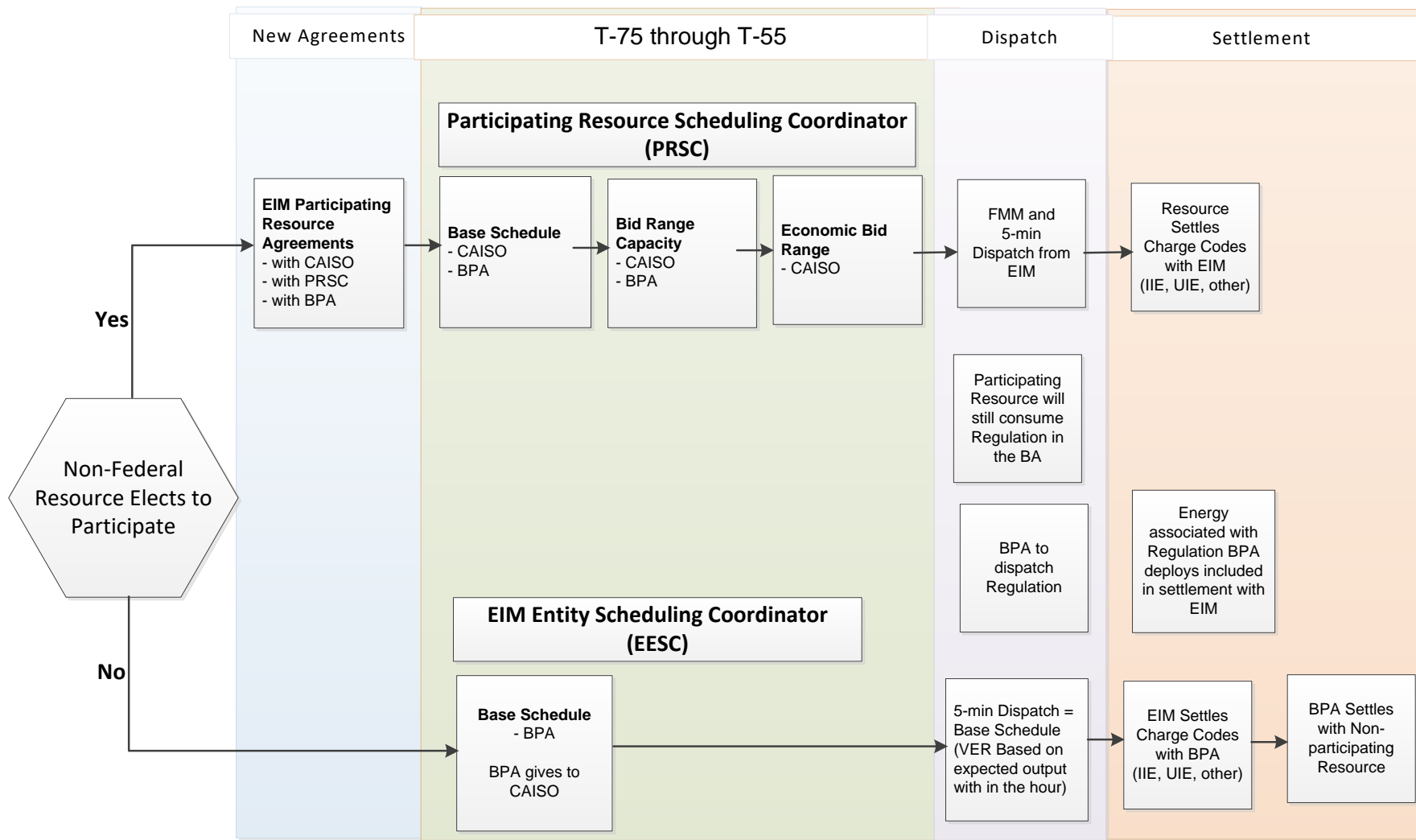
Fuel type

Pmin/PMax

Variable energy resource indicator

Information taken from California ISO Day-Ahead Market Overview Presentation

Participating Resource and Non-Participating Resource in the BPA BA



WHO CAN QUALIFY TO BE AN EIM PARTICIPATING RESOURCE?

Participating Resource Eligibility

The CAISO provides the ability for resources located in an EIM Entity's BAA to become an EIM Participating Resource. A resource in the BPA BAA that elects to be an EIM Participating Resource must:

- Be physically located in or Pseudo-Tied into the BPA BAA
- Meet the Requirements of the CAISO
- Meet any technical requirements of BPA as the EIM Entity
- Meet metering requirements
- Be able to respond to dispatch instructions

Generation located in the BPA BAA that meets the requirements of BPA and the CAISO are eligible to participate in the EIM.

BPA is developing its technical requirements

External Resource Participation Eligibility (Dynamic/Pseudo-Tie)

The CAISO requires that an EIM Participating Resource be physically located in or Pseudo-Tied into an EIM Entity's BAA.

Use of Pseudo-Ties:

- A resource owned or controlled by a Transmission Customer that is not physically located inside the metered boundaries of BPA's BAA may participate in the EIM as a BPA EIM Participating Resource if the Transmission Customer has implemented a Pseudo-Tie into BPA's BAA, consistent with BPA's business practice posted on Transmission Provider's OASIS, and has arranged firm DTC and transmission equal to the amount of energy that will be Dynamically Transferred through a Pseudo-Tie into BPA's BAA.

Use of Dynamic Schedules:

- A resource owned or controlled by a Transmission Customer that is not physically located inside the metered boundaries of BPA's BAA does not qualify to participate in the EIM as a BPA EIM Participating Resource if the Transmission Customer dynamically schedules the energy into BPA's BAA.

Based on the CAISO requirements, Resources that have implemented a Pseudo-Tie into BPA's BAA are eligible to participate in the EIM.

BPA is developing its technical requirements

Demand Response and Load Participation

The CAISO has market participation models that allow Demand Response and load to participate in the CAISO markets.

- Large single demand and/or demand response providers with the ability to aggregate customers capable of reducing their electric demand (load) can participate in the ISO day-ahead, real-time and ancillary services markets.
- Demand side resources can offer bids that reflect their flexibility to adjust their load in response to market schedules and dispatches.

BPA will need to determine to what extent BPA, as the EIM Entity, is able to support load within the BPA BAA, capable of Demand Response, to participate in the EIM.

Given the work load of becoming an EIM participant, BPA needs to prioritize work streams. At this time, enabling load to participate in the EIM is not a top priority.

If there are load customers that are wanting to participate in the EIM, please contact your AE.

EIM Participating vs Non-Participating

EIM Participating Resource:

- Eligible to be an EIM Participating Resource (located in or pseudo-tied into the BPA BAA)
- Characteristics of Resource provided to EIM
- Register with CAISO and BPA
- Have an EIM Participating Resource Scheduling Coordinator (PRSC)
- Submit resource plans
 - Base Schedules
 - Bid Range Capacity
 - Economic Bid Range
- Receive FMM and 5-min Dispatch from EIM
- Settle Charge Codes with EIM (IIE, UIE, other)

Non-Participating Resource:

- Located in or pseudo-tied into the BPA BAA
- Characteristics of Resource provided to EIM
- BPA to be the EIM Entity Scheduling Coordinator (EESC)
- Submit resource plans
 - Base Schedules
- Communicate with BPA about real-time operation
- Settle with BPA (BPA settle with EIM)

Participating Resources Scheduling Coordinator

The EIM Participating Resource shall be represented by an EIM Participating Resource Scheduling Coordinator (PRSC), which may be the EIM Participating Resource or another entity certified by the ISO to perform the functions of an EIM PRSC.

The PRSC is the participating resource (or a designated third-party) that:

- Is certified by the ISO
- Enters into the pro forma EIM Entity Participating Resource Scheduling Coordinator Agreement
- Interfaces with the Market Operator to:
 - Submit resource plans – the combination of
 - Base schedules
 - Energy bids
 - Ancillary services schedules
 - Receive dispatch instructions and market awards
 - Receive settlement statements and bills

Scheduling Coordination for Non-Participating Resources

Non-participating resources in the BPA BAA shall be represented by BPA as an EIM Entity Scheduling Coordinator (EESC)

BPA, as the EESC, will:

- Be certified by the ISO
- Enter into the *pro forma* EIM Entity Scheduling Coordinator Agreement
- Interface with the Market Operator to:
 - Submit resource plans – the combination of
 - Base Schedules
 - Ancillary services schedules (if any)
 - Submit Settlement Quality Meter Data (SQMD)
 - Receive settlement statements and bills

Issue: Technical Requirements for Participating and Non- Participating Resources

EIM Non-Federal Participating Resource Agreements

- The following CAISO agreements are required for all EIM Participating Resources:
 - [EIM Participating Resource Agreement](#) (CAISO/Resource)
 - [EIM Participating Resource Scheduling Coordinator Agreement](#) (CAISO/SC)

BPA BAA Technical Requirements for Participating and Non-Participating Resources

- The resource will need to meet BPA technical requirements in addition to all CAISO requirements.
- BPA will develop technical requirements and reflect those requirements in Tariff modifications and Business Practices.
 - BPA is in the process of reviewing EIM Business Practices posted by other BAs who have joined the EIM.
 - BPA will be as consistent with industry norms as possible.
- Business Practices will include:
 - BPA EIM Participating Resource Application and Processing
 - BPA EIM Participating Resource Certification
 - Resource Data requirements for both EIM Participating Resources and Non-Participating Resources
- Forms
 - Application Form
 - Non-Participating Resource Data