# CA Framework Coordinated Transmission Agreement Review

December 2<sup>nd</sup>, 2016

#### **Timeline**

- Today's stakeholder meeting
- Comment period (through December 23<sup>rd</sup>)
- Adjustments (if needed)
- Approval & filing (late January)
- Development & implementation (TBD)

#### What is the Coordinated Transmission Agreement (CTA)

- The CTA is a seams agreement between the EIM market operator (CAISO) and the transmission provider (BPA) that enables EIM Area flows on BPA's transmission system while ensuring the reliability of the BPA transmission system
- The CTA does not contain new concepts or ideas. Rather, it formalizes what has been previously agreed to in practice or in principle, even though the implementation of some of these concepts and ideas were deferred

#### **Section 2 - Definitions**

- Bonneville Managed Facilities: The transmission paths or facilities that:
  - 1. Bonneville establishes on its transmission system or any other transmission facilities for which Bonneville is the Transmission Operator;
  - Bonneville determines are impacted by the EIM and could reasonably affect Bonneville's ability to provide reliable transmission service to EIM participants or any of its other transmission customers; and
  - 3. are listed in section 1 of Exhibit C
- Managed Limit: The Bonneville Managed Facility flow limit that is determined by Bonneville

#### **Definitions (cont'd)**

- EIM Area Incremental Flow: The aggregate power flow contribution of flows resulting from the operation of the Real-Time Market, including the EIM
- EIM Area Total Flow: The aggregate power flow contribution of flows resulting from EIM Base Schedules, Day-Ahead Schedules, and EIM Area Incremental Flows

## **Section 3 – Coordinating Committee**

 BPA and CAISO will meet once a quarter to discuss items associated with the CTA, including discussing revisions to the CTA, dispute resolution, and is otherwise charged with implementing the CTA

# **Section 4 – Data and Information Exchange**

- Formalizes Data Sharing Between BPA and CAISO
- Currently, BPA and CAISO share data to enable the EIM on BPA's transmission system, but there is no formal agreement on what data is shared or how it is shared
- The CTA creates an obligation to share data and clarifies how the data is to be shared, including the granularity and the frequency of the data
- The CTA addresses data that is not already subject to existing sharing mechanisms – e.g. Peak Reliability Universal Data Sharing Agreement (UDSA)
- The CTA also includes confidentiality provisions that are modeled on the Peak Reliability UDSA
- A coordinating committee will meet quarterly to discuss how data is being exchanged and how the agreement is being implemented

#### **Section 5.1 – Upper and Lower Rate of Change Limits**

- The Rate of Change constraint has been operational since PAC go-live (10/2014) and has been discussed numerous times in previous stakeholder meetings
- BPA uses Upper and Lower Limits to manage impacts of variability due to the EIM 5-minute market
- BPA calculates and provides CAISO the Upper and Lower Rate of Change Limits
- CAISO uses specific EIM Participating Resources to manage EIM Incremental Flow so that BPA's rate of change limits are not exceeded

# Section 5.2 – Managing EIM Area Total Flows When BPA is Not Curtailing Transmission Schedules

- Applies when Managed Limits are exceeded or will be exceeded as a result of the next binding market interval, but BPA has not yet initiated curtailments
- BPA manages the congestion event consistent with procedures, Business Practices and OATT
- BPA sends CAISO a signal indicating an event on a BPA Managed Facility
- After receiving the signal from Bonneville, the CAISO manages EIM Area Incremental Flow so that EIM Area Total Flow does not increase until otherwise notified by Bonneville

# Section 5.3 – Managing EIM Area Total Flows When BPA is Curtailing Schedules

- BPA calculates pro-rata relief obligation of EIM Area total Flow based on its OATT and sends EIM Area Total Flow Limit to CAISO reflecting the relief obligation
- CAISO manages EIM Area Incremental Flow to provide obligated reduction in EIM Area Total Flow
- BPA curtails other obligations not provided by CAISO EIM redispatch consistent with procedures, Business Practices, and OATT
- Tags associated with relief obligations provided by CAISO EIM are exempted from the traditional curtailments
- This section should reduce the magnitude of curtailments for all BPA transmission customers

# Section 5.4 – Adjustment of Generation

- Applies to major loss of generation due to South of Allston congestion event
- Designed to mitigate risk of excessive or inaccurate curtailments
- Does not apply to lost EIM Area generation that is replaced by contingency reserves
- CAISO will endeavor provide replacement generation by dispatching EIM Area generation that is electrically south of the constraint
- If EIM offered generation is insufficient, CAISO will send advisory
   Base Schedule adjustments to EIM Entities and BPA
- BPA may temporarily waive other specific limits to facilitate the replacement generation from CAISO dispatches
- BPA will mitigate the remaining relief consistent with the CTA, its procedures, BPs and OATT

# **Development & Implementation**

- No prescriptive implementation date in the agreement
- BPA and the CAISO will develop operating procedures to implement the provisions of the Agreement and will coordinate with EIM Entities and other impacted parties during this development process
- We will work towards developing the necessary systems and processes to implement sections 5.2 through 5.4 as soon as practicable in accordance with BPA and the CAISO's respective implementation processes
- The Coordinating Committee shall oversee the initial development and the ongoing review of the associated operating procedures and implementation schedules, phased or otherwise
- Implementation costs are expected to be reasonable

#### **Comment Period**

- BPA will accept comments about the CTA from December 2<sup>nd</sup> through December 23<sup>rd</sup>
- Comments should be emailed to <u>techforum@bpa.gov</u>
- Please include "CTA Comments" in the subject of the email
- BPA will post comments and responses the week of 1/3/17

## **Questions?**