### California ISO

# Extended day-ahead market revised straw proposal on transmission discussion

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Market Surveillance Committee Meeting

**General Session** 

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ISO Public

### EDAM design components – an overview

#### **Pre-Day Ahead**

- Resource Sufficiency Evaluation (RSE)
- Transmission
   Commitment

### Day-Ahead Processes (10am – 1pm)

- IFM/RUC Processes
- Market Power Mitigation
- Convergence Bidding
- External Resource Participation
- GHG Accounting

#### **Post-Day Ahead**

- Transfer revenue allocation
- Settlements



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### Agenda

- 1. Review of Revised Straw Proposal on Transmission
- 2. Discussion of Key Areas of Stakeholder Feedback
- 3. Potential Modifications



### **EDAM Transmission Framework**

### Bucket 1 Transmission

- Supports delivery of supply across EDAM interfaces for RSE purposes
- •Made available by Transmission Customer (Day Ahead)
- Receives transfer revenue
- •Firm or Conditional Firm transmission rights

#### Bucket 2 Transmission

- •Firm or Conditional Firm transmission rights
- •In excess of transmission needed to support RSE
- Made available by Transmission Customer
- •Receives transfer revenue

### Bucket 3 Transmission

- Unsold Firm ATC
- Made available by Transmission Provider
- Cost recovery through historical TRR recovery in EDAM
- Receives transfer revenue



### Bucket 1 Transmission – Supporting the RSE

- Supports delivery of supply across EDAM interfaces for RSE purposes
- Made available by Transmission Customer (day-ahead)
- Receives transfer revenue
- Firm or Conditional Firm transmission rights



### Bucket 2 – Customers' Transmission Rights

- Transmission customer use of transmission rights:
  - Pathway 1 can utilize transmission rights, day ahead.
    - Receive day ahead transfer revenue through EDAM entity.
  - Pathway 2 can release the transmission rights to EDAM
    - Receive transfer revenue from ISO directly.
    - Can continue to self schedule or economically bid in real-time (but not associated with use of transmission rights)
    - Limited to monthly and long term rights
  - Pathway 3 unscheduled transmission is made available to EDAM.
    - Can exercise previously unscheduled rights between day ahead and real time.
    - Accommodate exercise of rights through redispatch
    - Day ahead transfer revenue (associated with unscheduled transmission) settled with EDAM entity who may seek to offset costs of accommodating exercise of rights.
- Legacy transmission contracts (pre-OATT) can continue to be exercised under the terms of the agreement
  - Pathway 2 may be available based on terms of agreement.
  - Pathway 3 may not be applicable and unscheduled rights would not be in market.



# Bucket 3 - Transmission Cost Recovery without Hurdles in Optimization

- Bucket 3 transmission will be available to the EDAM hurdle free (transmission provider unsold firm ATC).
  - Eliminating the hurdle rate will increase market efficiency and the overall benefits.
  - Foregone revenues with bucket 3 transmission, including short term firm ATC, would be eligible for cost recovery within the calculation.
- Bucket 3 transmission would also receive transfer revenue associated with the transmission made available.



### **Transmission Cost Recovery**

EDAM Straw Proposal allows for the recovery of certain transmission costs:

- Historical revenues associated with the short-term firm and non-firm point-to-point products for OATT Customers (associated with sales to 3<sup>rd</sup> parties)
- Foregone reduction in wheeling access charge (WAC) revenues in the ISO
- 2. Revenues on approved new transmission builds that increase transfer capability between EDAM BAAs
- 3. Revenues for EDAM transfer wheeling-through volumes for EDAM BAAs that exceed the total imports/exports from the EDAM entity BAA.



## Component 1: Assurance for recovering Historic Transmission Revenues

- For EDAM entities operating under the OATT, the EDAM recoverable TRR is the historical transmission revenue requirement for short-term firm point to point and non-firm point to point transmission
- For the ISO, the EDAM recoverable TRR is the total historical WAC revenues associated with third parties.
- Two key questions regarding calculation of the EDAM recoverable TRR:
  - (a) across what time period is the gross at risk TRR derived?
    - Three years historical data
  - (b) how often is the gross at risk TRR value updated?
    - Updated after 2 years

	Total TRR	Non-Firm TRR (3 <sup>rd</sup> party)	Short-term Firm TRR (3 <sup>rd</sup> parties)	EDAM Recoverable TRR (for EDAM)	Ratio (EDAM recoverable TRR / Total TRR)
EDAM Entity (OATT)	\$100 Million	\$3 million	\$4 million	\$7 million	<b>7%</b> Page 9

### **Netting Transmission Sales**

- The total revenues recoverable through the EDAM consist of the difference between the EDAM recoverable TRR, which is based on historical values and the actual transmission revenues collected through transmission sales of the products eligible for recovery.
- Formula below illustrates further the example of the TRR shortfall recoverable through the EDAM.

 $TRR\ Shortfall = EDAM\ Recoverable\ TRR\ (historical) - Actual\ transmission\ revenues$ 



# Component 2: Percentage of New Transmission Build Revenue Requirement

- New transmission builds raise the potential of foregone transmission revenues associated with non-firm and shortterm firm transmission sales.
- recoverable to the EDAM is limited to the ratio of the non-firm and short-term firm point to point revenue requirement.
- If the upgrade adds \$50 million to the total TRR, and the historical percentage of sales was 7%, then the amount recoverable through the EDAM is 7% of that amount, a total of \$3.5 million.

EDAM Entity \$100 Million (OATT)	\$3 million	\$4 million	\$7 million	7% Page 11

# Component 3: Recovery of Transmission Costs Associated With Significant EDAM Wheeling Through

- The proposal is that in those limited periods where this net difference occurs, the EDAM entity be compensated for the excess transmission use supporting net wheels through its system.
- The wheels through the EDAM entity system created benefits for other EDAM BAAs but not for that entity.
- The volume of net wheels through the EDAM entity transmission system, net of EDAM transfer imports/exports, would be compensated at the EDAM entity's filed and approved non-firm hourly point to point transmission rate.



### **Transmission Cost Assignment**

- Two Options to apply the uplift rate:
  - 1. to gross load across the footprint or
  - 2. to demand plus supply across the footprint.
- In allocating this uplift charge, the proposal is not to allocate an EDAM entity its own TRR revenue shortfall so its metered demand does not have to pay for its TRR cost recovery.



### CAISO BA Transmission in EDAM - RSE

Entities relying on resources wheeled through or export from the ISO to meet the EDAM RSE would have the following pathways:

- 1. Wheeling through the ISO system entities would demonstrate establishment of a wheeling through priority across the ISO system and bring Bucket 1 transmission to the EDAM across the interface
- 2. Exports from the ISO system entities would demonstrate establishment of high priority export status to export non-resource adequacy supply
- The WAC charges would be assessed for the period that the high priority export is being shown for the RSE.



#### CAISO BA Transmission – Other Buckets

- Bucket 2 transmission on the ISO system is primarily associated with legacy contracts
  - could be made available to the market based upon the terms of the agreement
- Bucket 3 consists of the remaining transmission on the ISO system, which is unreserved and unsold
  - TRR recovery proposal allows for the recovery of the shortfall associated with historical WAC revenues



### Recap of Key Stakeholder Feedback –

- Requested direct Settlement of Congestion Revenues and alternative crediting of Transfer and Congestion Revenues
- Advocated for a Transmission Service requirement for generation
- Advocated the design must be able to recognize transmission priorities
- Express concern that the proposed Bucket 3 would use all of the remaining unscheduled transmission limiting bilateral market options
- Argue that Bucket two, pathway three as designed would subject transmission rights holders to high real time redispatch costs
- Express a variety of concerns with transmission used to support WSPP Schedule C (and comparable firm energy contracts)



### Recap of Potential Modifications

- Settlement with EDAM entity of transfer revenue
  - Bucket 2 Pathway 3 transfer revenue settled with EDAM entity, does entity pass it through directly to customer or pool it with other revenues?
  - Participants and ISO seeking standardization
- Allow EDAM Entity requirement for having transmission either as part of a NITS or purchasing firm point-to-point transmission to the border of the EDAM entity BAA

