Real-Time Settlement Review
Draft Final Proposal

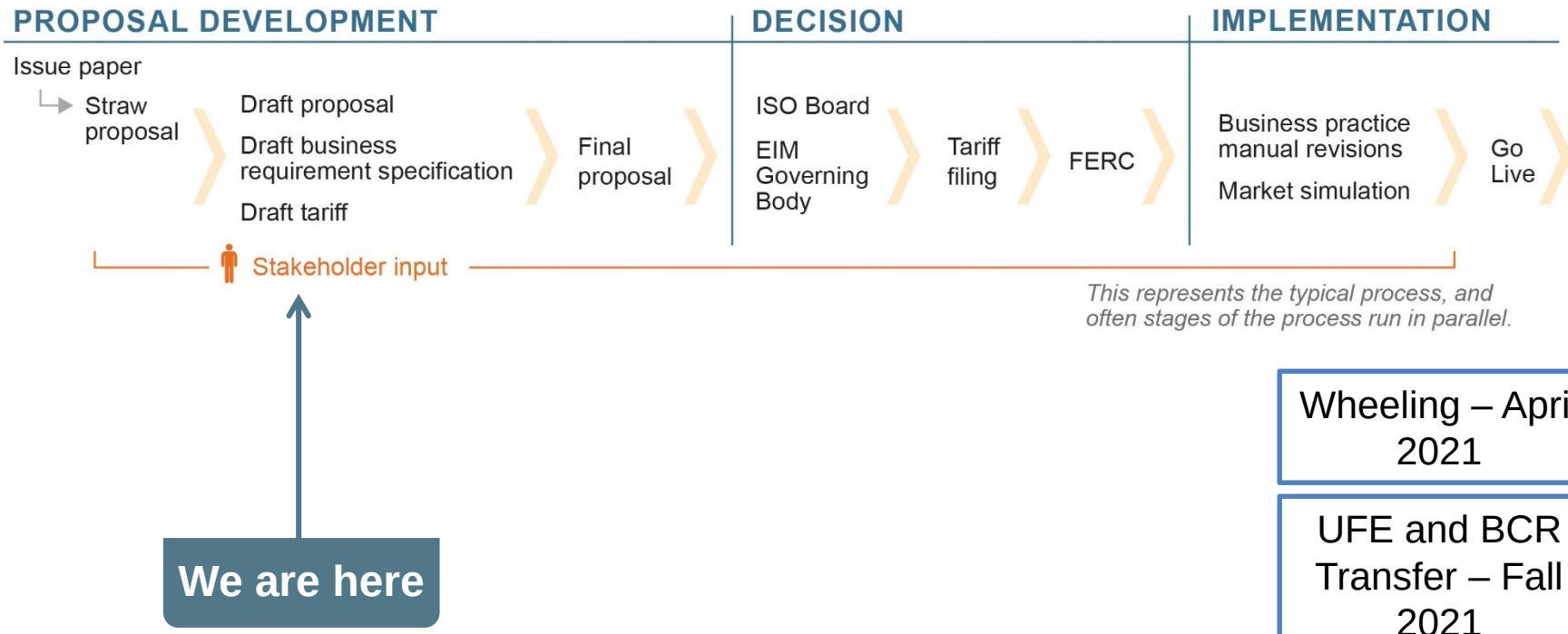
Stakeholder Meeting

October 28, 2020

Agenda

Time	Topic	Presenter
10:00 – 10:10 AM	Welcome and Introductions	Kristina Osborne
10:10 – 10:20 AM	Proposal Overview	James Friedrich
10:20 – 11:50 AM	Changes in Draft Final Proposal	James Friedrich / James Lynn
11:50 AM – 12:00 PM	Next Steps	Kristina Osborne

CAISO development process for RTSR



Wheeling – April 2021

UFE and BCR Transfer – Fall 2021

RTSR schedule

Item	Date*
Post Draft Final Proposal	Oct 21, 2020
Stakeholder Conference Call	Oct 28, 2020
Stakeholder Comments Due	Nov 11, 2020
Post Draft Tariff Language	Nov 5, 2020
Stakeholder Comments Due	Nov 17, 2020
Stakeholder Conference Call	Nov 19, 2020
EIM Governing Body	Dec 2, 2020
ISO Board of Governors	December 16-17, 2020

**Dates are tentative and subject to change*

Real-Time Settlement Review

PROPOSAL OVERVIEW

Summary of Issue Paper/Straw Proposal

1. CAISO is completing additional metrics to assess RT settlements
   - Three metrics: imbalance energy, congestion, offsets
2. Asymmetrical wheeling settlement
   - Issue: Asymmetrical settlement for wheeling transactions through an EIM BAA when one of the BAAs has a PBC violation
   - Proposal: Tariff change to require all EIM BAAs to settle Base ETSR schedule deviations at Scheduling Point – Tie Prices
3. Unaccounted For Energy (UFE) settlement
   - Enhancement: Tariff change to allow EIM BAAs who derive their load using generation and intertie meters to choose not to have CAISO calculate their UFE settlement

Stakeholder comments

- One additional consideration identified by stakeholders
- More description of settlement mechanics associated with EIM BAA decision not to settle UFE
  - Hosted a stakeholder call on 9/29 to walk through UFE settlement examples
- CAISO should publish metrics data

Changes in Draft Final Proposal

- Considers an additional real-time settlement metric
- Describes CAISO's commitment to publishing the metrics created for this initiative
- Expands on the example of asymmetrical wheeling settlement to clarify how optional settlement of Base ETSR schedule deviations exacerbates cost shifting
- Proposes an additional settlement change to the calculation that adjusts the allocation of real-time bid cost recovery uplift costs to account for EIM transfers

Real-Time Settlement Review

CHANGES IN DRAFT FINAL PROPOSAL

CAISO will consider an additional real-time settlement metric identified by stakeholders

- CAISO proposes to identify the magnitude and financial impact of unscheduled flows by
  - Comparing total net physical intertie meter readings for each BAA against total net e-tag schedules, including ETSR e-tags
  - Analyzing the market value of unscheduled flows

- CAISO will present results at a future MPPF meeting. If impact is significant, CAISO may do further analysis or consider market changes in a potential future stakeholder initiative.

QUESTIONS?

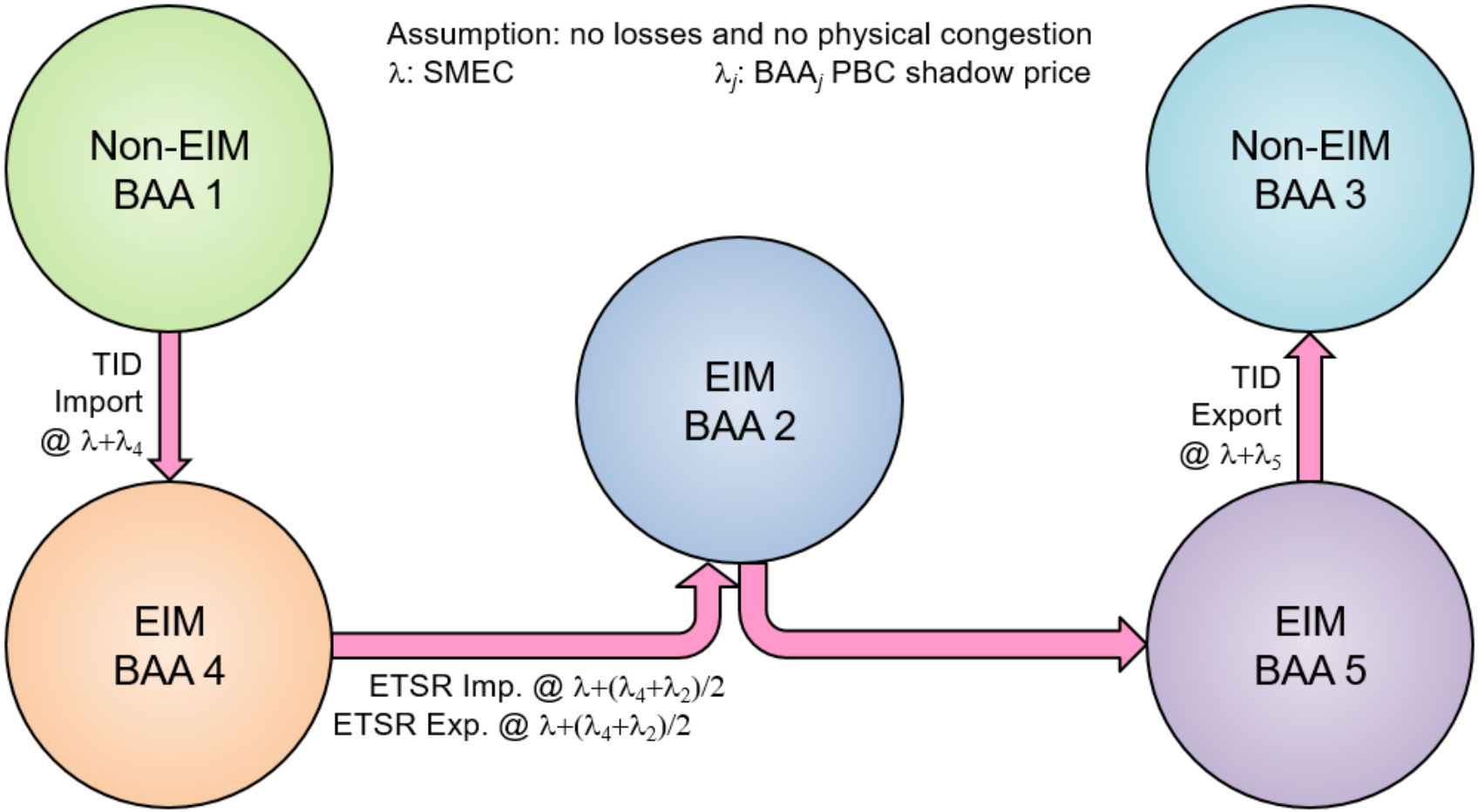
CAISO will commit to publishing the real-time settlement metrics created for this initiative

- Metric 1 (Imbalance Energy and Financial Value Settlement) and Metric 2 (Real-Time Congestion Comparison) will be published at MPPF

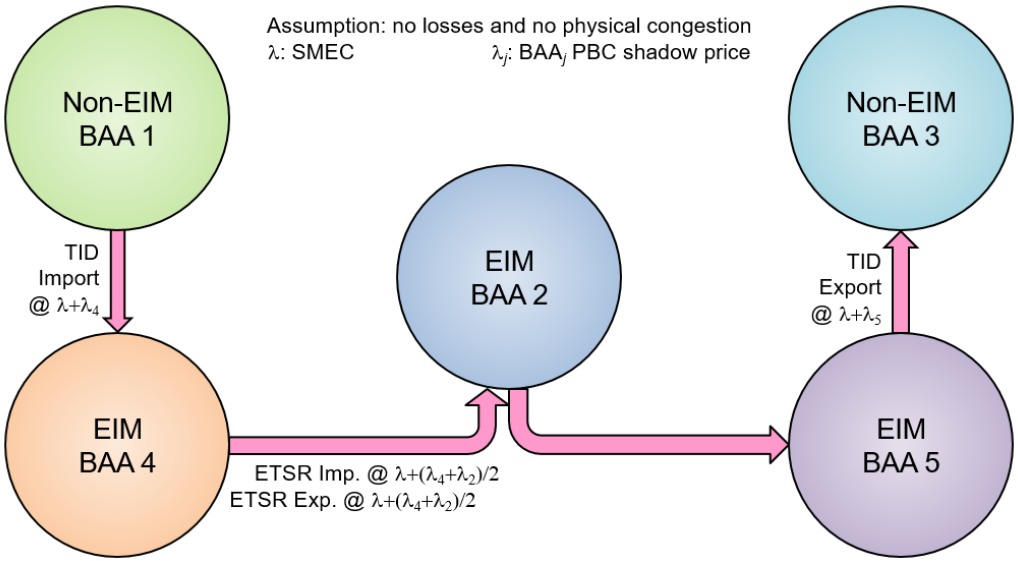
- Metric 3 (Real-Time Offset Comparison) is represented by existing metrics in the Market Performance Metric Catalog
  - Figures 173 and 174

QUESTIONS?

Expanded example of asymmetrical wheeling settlement (1/2)



Expanded example of asymmetrical wheeling settlement (2/2)



EIM	SMEC (λ)	PBC (λ_j)	LMP
BAA 4	$30	$0	$30
BAA 2	$30	$500	$530
BAA 5	$30	$0	$30

Energy Flow	EIM	MW	Settlement	Congestion	RTCO
Import	BAA 4	100	$3,000	$-25,000	$0
ETSR4-Export	BAA 4	-100	$-28,000		
ETSR2-Import	BAA 2	100	$28,000	$28,000	$-3,000
ETSR2-Export	BAA 2	-100			
ETSR5-Import	BAA 5	100		$-3,000	$3,000
Export		-100	$-3,000		

QUESTIONS?

CAISO proposes additional settlement change to the calculation that adjusts allocation of real-time BCR uplift costs to account for EIM transfers

- RT BCR uplift costs in CAISO are allocated to load and exports
  - Adjustment for EIM transfers =
    $$BCR\ Amount\ (\$)\ x\ \frac{Net\ EIM\ Tranfer\ Out}{Net\ EIM\ Transfer\ Out+ABS(UIE)+ABS(UFE)}$$

- Cost causation principles of RT BCR were explored in BCR Enhancements initiative (2017)
  - Allocating RT BCR by cost causation is difficult because market commits units in RT for many reasons not tied to a specific SC (e.g., unscheduled flow, transmission outages)

- Proposal: remove UIE and UFE from BCR cost transfer calculation to better align with existing CAISO methodology
  - RT BCR will be allocated to load and exports, including ETSRs
  - Adjustment for EIM transfers =
    $$BCR\ Amount\ (\$)\ x\ \frac{Net\ EIM\ Transfer\ Out}{ABS(Net\ EIM\ Transfer\ Out+Load+Export)}$$

QUESTIONS?

Real-Time Settlement Review

NEXT STEPS

EIM Governing Body classification

- The CAISO proposes the EIM Governing Body have **primary authority** in the approval of the asymmetrical wheeling settlement and unaccounted for energy changes

- The CAISO proposes the EIM Governing Body have an **advisory role** in the approval of the bid cost recovery transfer change

- Stakeholders are encouraged to submit responses to the EIM classification in written comments

Next steps

- Submit comments on the draft final proposal using the online template by close of business Nov 11, 2020
  - https://stakeholdercenter.caiso.com/Comments/MyComments/2897970f-7309-47ce-a76e-d6c03729bf13