

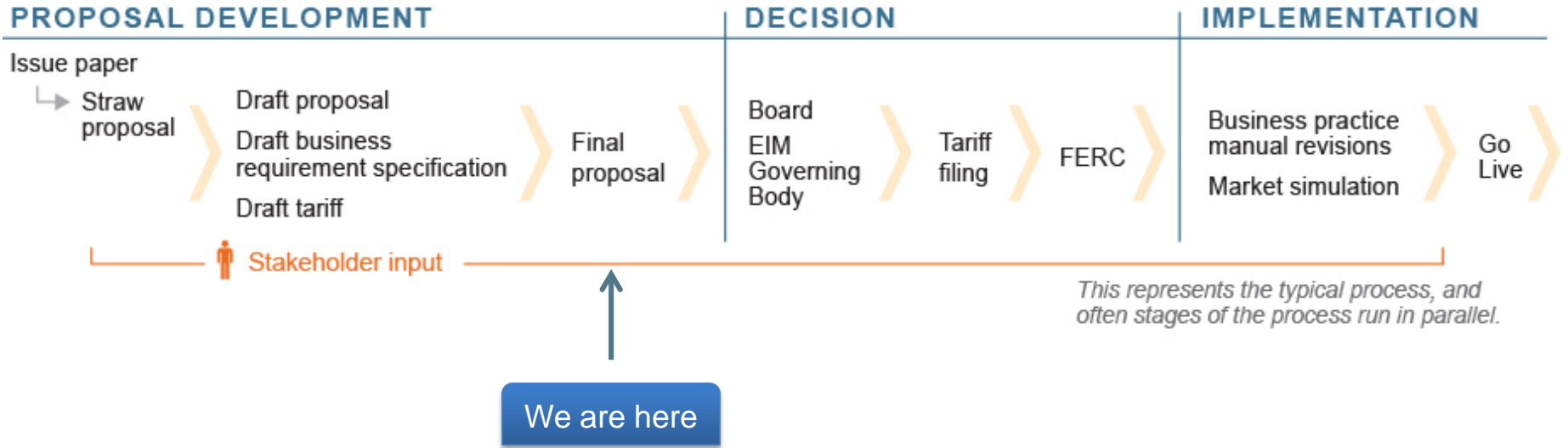


FERC Order 831- Import Bidding and Market Parameters

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Stakeholder Web Conference
August 31, 2020
9:00 a.m. – 11:00 a.m.

CAISO Policy Initiative Stakeholder Process



Agenda

- Introduction/Background
- Market Parameters
- Import Bidding
- EIM Classification
- Next Steps

INTRODUCTION/BACKGROUND

Background

- FERC Order 831 required ISO/RTOs make compliance filing to raise energy offer caps to \$2,000/MWh
 - Verify generator costs for bids above \$1,000/MWh before the market run to be eligible to set energy prices
 - Did not require verification rules for import or virtual bids above \$1,000/MWh
- ISO requested FERC defer implementation of 831 compliance filing until completion of this initiative and implementation of the resulting enhancements

This initiative addresses two topics related to the CAISO's compliance with FERC Order No. 831

1. Adjusting CAISO market constraint relaxation parameter prices, "penalty prices," to align with the increased energy bid cap
2. Price screening methodology for import bids greater than \$1,000/MWh

Stakeholder comments received on revised draft final proposal were overall supportive with a few suggested modifications

- Most stakeholders agreed scaling penalty prices relative to \$2,000/MWh when there is a cost verified bid above \$1,000/MWh
- Most stakeholders agreed with a small MW threshold for power balance constraint relaxation before going to \$2,000/MWh
 - Stakeholders suggested a graduated demand curve or utilize an objective NERC reliability standard to set penalty prices in the pricing run
- MSC pointed out that hourly price patterns are different on high price days (i.e. days when prices are greater than \$200/MWh)

MARKET PARAMETERS

The CAISO has revised its power balance constraint relaxation pricing approach for when the \$2,000/MWh power balance constraint is in place

- Set market prices based on the amount of shortfall in supply to meet demand when the power balance constraint is relaxed and cost-verified bids are greater than \$1,000/MWh
 - If infeasibility \leq threshold amount (i.e. 234 MW for CAISO BAA), prices set based on the highest-priced cleared bid, unless that bid is less than \$1,000/MWh
 - Else, if infeasibility $>$ threshold amount (i.e. 234 MW for CAISO BAA), prices set based on \$2,000/MWh power balance constraint

Revised approach to set threshold values based on defined NERC Balancing Authority ACE Limit (BAAL) standard

- Shortfalls in supply are reflected in system frequency
- Consequently, CAISO proposes to define the threshold based on the amount of shortfall in supply for which a BAA's frequency will stay within reliability standards
- NERC BAAL limit defines the acceptable frequency deviations, which can be converted to a MW amount
 - Defined by NERC for each BAA

$$Threshold = (-10B_i \times (FTL_{Low} - F_s))$$

Threshold is appropriate for pricing \$2,000/MWh power balance constraint relaxation because small shortfalls may not represent actual supply shortfalls

- Small shortfalls may be because of forecast and modeling inaccuracies and may not represent actual shortfalls
- EIM BAAs may have other resources that are not in the market and therefore small market shortfalls may not represent actual supply shortfalls
- \$2,000/MWh power balance penalty price may be much greater than highest verified bid above \$1,000/MWh
- It is appropriate that there be additional measures to ensure a supply shortfall is real and significant before setting prices based on \$2,000/MWh power balance constraint parameter
 - Consistent with spirit of FERC Order 831

2020 threshold amounts for each BAA based on the NERC BAAL limit standard

Balancing Authority Area	2020 Frequency Bias Setting (MW/0.1 Hz)	CAISO Calculated Threshold Values (MW)
AZPS	-99.1	67.8
BANC - total	-28.4	19.4
BCHA	-112.9	77.2
CAISO	-341.7	233.7
IPCO	-37.7	25.8
NEVP	-63.0	43.1
PACE	-89.9	61.5
PACW	-46.1	31.5
PGE	-39.5	27.0
PSEI	-35.1	24.0
SCL	-39.0	26.7
SRP	-56.7	38.8

IMPORT BID SCREENING

Maximum import bid price screen determined by shaping electric hub prices

$$\text{MIBP} = \text{Electric Hub Price} \times \text{Hourly Shaping Factor}$$

Where, Hourly Shaping Factor is:

$$1 + \left[\frac{(\text{CAISO Hourly DA SMEC} - \text{CAISO Average DA SMEC of on/off peak hrs})}{\text{CAISO Average DA SMEC of on/off peak hrs}} \right]$$

- Electric hub price is determined by the maximum of Mid-Columbia and Palo Verde Trading Hub Price
 - Evaluating feasibility of also incorporating super peak index
- Use a representative high priced day's SMEC (i.e. > \$200) within the same season in each hour to shape prices
 - Proposal recognizes that the hourly prices vary based on seasonal conditions

EIM GOVERNING BODY CLASSIFICATION AND NEXT STEPS

Some EIM entities objected to the CAISO's proposed advisory classification for penalty prices in the revised draft final proposal

- They argued for EIM Governing Body primary authority over the penalty pricing provisions
 - They stated that the proposal is EIM-specific since the CAISO, in its previous proposal, asked each EIM BAA to propose their own threshold values based on documented operational practices
 - CAISO has updated this part of the proposal and will no longer be asking EIM BAAs to propose their own threshold values

EIM Governing Body Classification

- The proposal falls within the EIM Governing Body's advisory role
 - Proposed changes would not change any market rules that are EIM-specific, and
 - The level of penalty prices when a market constraint is relaxed is not "specific to" EIM balancing authority areas to the exclusion of the CAISO balancing authority area. This is an issue for the entire market footprint.
- Stakeholders are encouraged to submit a written response if they have concerns or questions

Proposed Initiative Schedule



Date	Milestone
8/24/20	Publish Final Proposal
8/31/20	Stakeholder call
9/4/20	Stakeholder comments due
July – Aug 2020	Development of Draft Business Requirements Specifications and Draft Tariff Language
Sept 16, 2020	EIM Governing Body
Sept 30 – Oct 01, 2020	Board of Governor's meetings
Implementation	Fall 2021, concurrent with FERC 831 implementation

Next steps

- All related information for the FERC Order 831 – Import Bidding and Market Parameters initiative is available here:
<https://stakeholdercenter.caiso.com/StakeholderInitiatives/FERC-Order-831-Import-bidding-and-market-parameters>

- Please submit written comments on today's discussion and the final proposal by **September 4, 2020**.

Important – Please review new process for submitting comments

- Provide comments using the new stakeholder commenting tool
- First-time users must register using their email address in order to submit comments on initiatives
- The commenting tool is located on the Stakeholder Initiatives landing page (click on the “commenting tool” icon):
<https://stakeholdercenter.caiso.com/StakeholderInitiatives>