



# Updates to Short Start and Long Start Unit Definitions

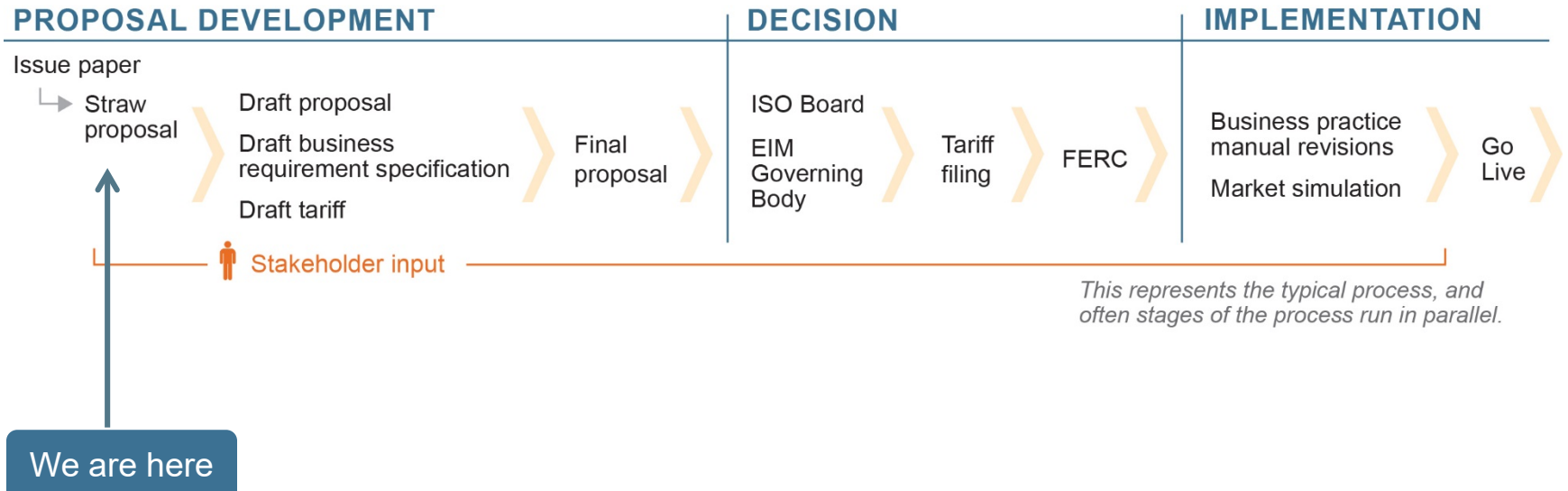
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# Agenda

Topic	Presenter
Welcome and stakeholder process	Ellie Casillas
Background	Sidney Mannheim
Proposal	Sidney Mannheim
EIM Classification and next steps	Ellie Casillas

# CAISO policy initiative stakeholder process



# Initiative Scope

The CAISO is resuming an initiative that commenced in the summer of 2021 to update two tariff definitions. Specifically, the CAISO is proposing to update the definitions of Short Start Unit and Long Start Unit definitions using 255 cycle time:

## - Short Start Unit

A Generating Unit that has a cycle time less than or equal to 255 minutes~~five hours~~ (Start-Up Time plus Minimum Run Time is less than or equal to 255 minutes~~five hours~~), ~~has a Start-Up Time less than two hours~~, and can be fully optimized with respect to this cycle time.

# Initiative Scope

The CAISO proposes to update two tariff definition in Appendix A to the CAISO Tariff:

## - Long Start Unit

Generating Unit that has a cycle time of more than 255 minutes (Start-Up Time plus Minimum Run Time is more than 255 minutes) and requires ~~between five and~~ up to 18 hours to Start-Up and synchronize to the grid.

## Initiative Scope

Updating these two definitions will differentiate the resources that can be started in the real-time market, in either the real-time unit commitment (RTUC) process or the short term unit (STUC) process from the resources that have be committed in the day-ahead (or even two days-ahead).

Amending the Short Start and Long Start definitions to refer to the 255 minute cycle time (startup time plus minimum run time) properly align the definitions to the real-time market and day-ahead market functionality.

# BACKGROUND

The CAISO's real-time market includes two commitment processes.

- The RTUC—The Real-Time Unit Commitment, which commits resources with comparatively shorter start-up and minimum run time (cycle times).
- The STUC—Short Term Unit Commitment, which commits resources with comparatively longer cycle time, but can still be started in the real-time market.

Currently, STUC only has a total of 255 minutes available to commit the longest of the short start resources.

## REAL-TIME COMMITMENT PROCESSES



The Appendix A to the CAISO's tariff currently defines a Short Start Unit as having a maximum cycle time of 300 minutes and the business practice manual specifies 270 minutes.

The CAISO has two options:

- 240 minutes, which the CAISO had proposed in the Summer 2021 tariff clarifications initiative. The 240 minutes was premised on the need for STUC to consider start up, minimum run time while reserving 15 minutes for decommitment decisions.
- 255 minutes, which the CAISO is now proposing aligning the STUC time horizon with the definition of Short Start Unit and allowing decommitment decisions to be made in future commitment processes.

## **REAL-TIME COMMITMENT PROCESSES**

The Resource Adequacy program exempts Long Start Resources from submitting real-time market bids in the absence of a day-ahead schedule. The RAAIM structure was designed using the definition of Long Start Unit in Appendix A. A problem occurred when:

- A Generating Unit had a longer cycle time than specified in the definition of a Short Start Unit and, therefore, did not meet the definition of a Short Start Unit.
- A Generating Unit had a shorter Start-up time than the 300 minutes specified in the definition of Long Start Unit and, therefore did not meet the definition of a Long Start Unit.
- Generating Units falling into this gap did not meet any definition, but because they failed to meet the definition of Long Start Unit, they had to submit bids into the real-time market to avoid RAAIM penalties even though the market software treated the resources as long start units. The solution is to use cycle time in both definition.

## RAAIM PENALTY MISALIGNMENT

# PROPOSAL

- The foundational tariff change are to update the two definitions as discussed above. Updating the Short Start Unit and Long Start Unit definitions will align the definitions to the market software.
- Resources meeting the definition of a Short Start Unit will be fully capable of being committed in the real-time market based on their cycle time (start up and minimum run time) of 255 minutes or less.
- Resources meeting the definition of Long Start Unit will no longer need to submit real-time energy bids to avoid RAIM penalties.

## **PROPOSED TARIFF CHANGES—UPDATE SHORT START UNIT AND LONG START UNIT DEFINITION**

- The real-time market software commits resources based on their cycle time. There is no need to have three different categories of resources defined as resources that can be started in the real-time market. Accordingly, the definitions of Fast Start Unit and Medium Start Unit will be removed.
- The CAISO is also adding additional tariff language to make it clear that decommitment decisions need not be made in the same STUC process.

## **PROPOSED TARIFF CHANGES—ELIMINATE MEDIUM START AND FAST START DEFINITIONS AND MAKE CONFORMING CHANGES IN CAISO TARIFF**

# EIM GOVERNING BODY CLASSIFICATION AND NEXT STEPS

## EIM Governing Body classification

- The proposed changes to Short Start Unit and Long Start Unit and related tariff changes would be “applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM.” None of the proposed tariff rules would be applicable “only to the CAISO balancing authority area or to the CAISO-controlled grid.” Accordingly, the matters scheduled for decision in March 2022 fall entirely within the scope of joint authority.

## Next Steps

 <b>February 4</b>	Stakeholder submit comments
<b>February 16</b>	Post draft final proposal, if needed
<b>February 23</b>	Stakeholder meeting, if needed
<b>March 3</b>	Comments due, if needed
<b>March 9</b>	Governance documents to be published
<b>March 16</b>	Joint CAISO Board/EIM Governing Body meeting
<b>March 21</b>	Target date for Tariff amendment filing

Submit comments using the online template on the initiative webpage at <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Short-long-start-unit-definitions-update>