



California ISO

Decision on commitment costs and default energy bid enhancements

Brad Cooper

Manager, Market Design Policy

Board of Governors Meeting

General Session

March 22, 2018

Background - current ISO supply offer design

- Three-part bids
 - Energy above minimum load
 - Minimum load
 - Start-up (or multi-stage generator transition)
- ISO calculates daily “reference levels” for each gas-fired generator based on published natural gas price indices
 - Commitment cost (i.e. minimum load and start-up)
reference level = costs X 125%
 - Energy reference level (default energy bid) = costs X 110%
- Commitment cost bids always capped at generator’s reference level
- Energy bids capped at default energy bid only if generator fails local market power mitigation test

Current commitment cost bidding design prevents suppliers from accurately reflecting commitment costs

- Commitment cost bid caps are not always aligned with generators' actual costs
 - May not reflect actual costs throughout the ISO and broader EIM footprint
 - May not reflect volatile or illiquid gas markets
- Inaccurate commitment cost bid caps can undermine market efficiency and discourage market participation
- ISO is only ISO in U.S. that caps commitment costs at reference levels without testing for market power
- Current daily minimum load bids cannot reflect costs that change throughout the day

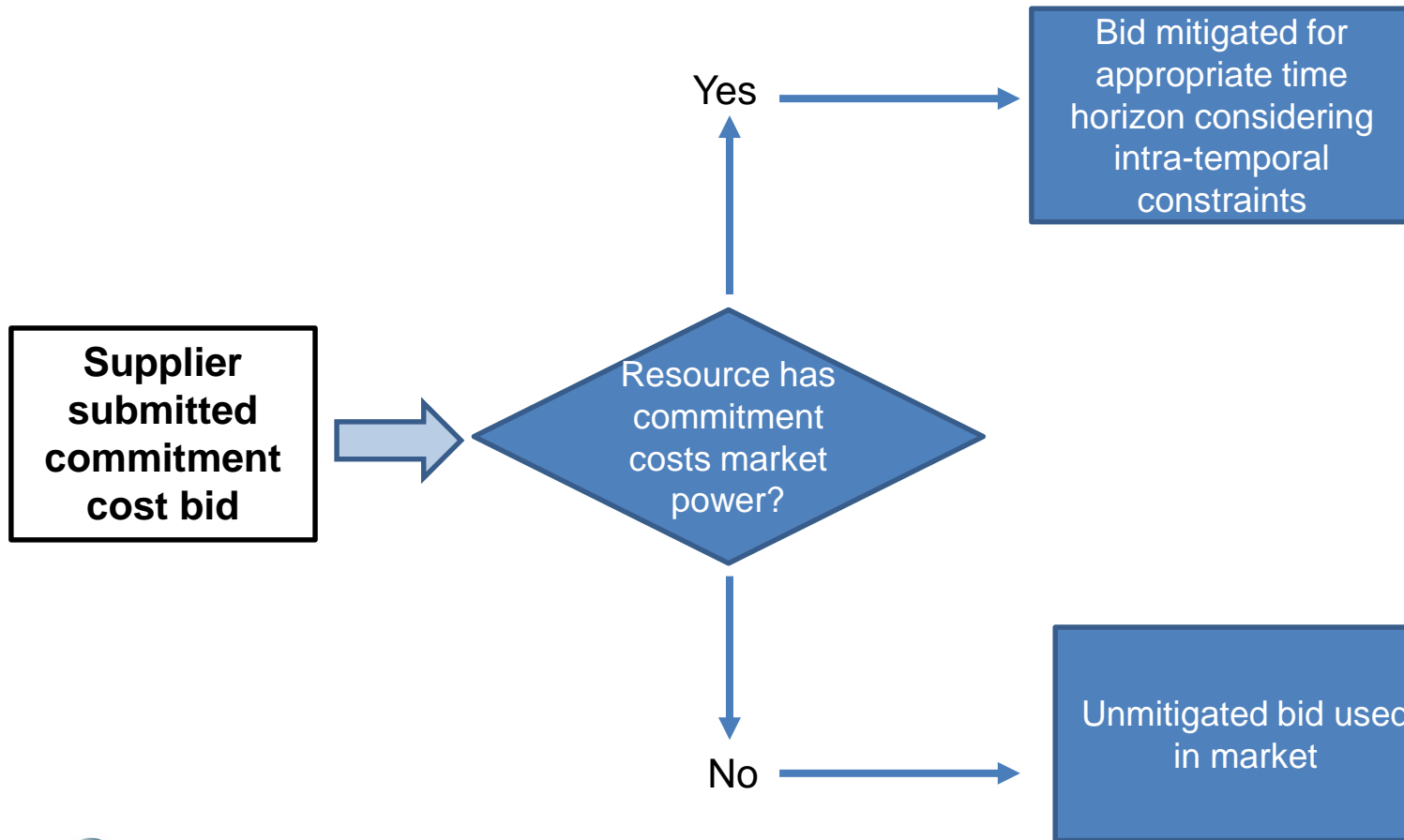
Proposal enhances suppliers ability to accurately reflect commitment costs (1 of 2)

- Replaces the static commitment cost cap with commitment cost local market power mitigation test
 - ISO will only mitigate commitment cost bids if resource fails commitment costs local market power mitigation test
 - Test identifies whether a resource needs to be committed to relieve a transmission overload
 - Circuit breaker bid cap will protect against test failures

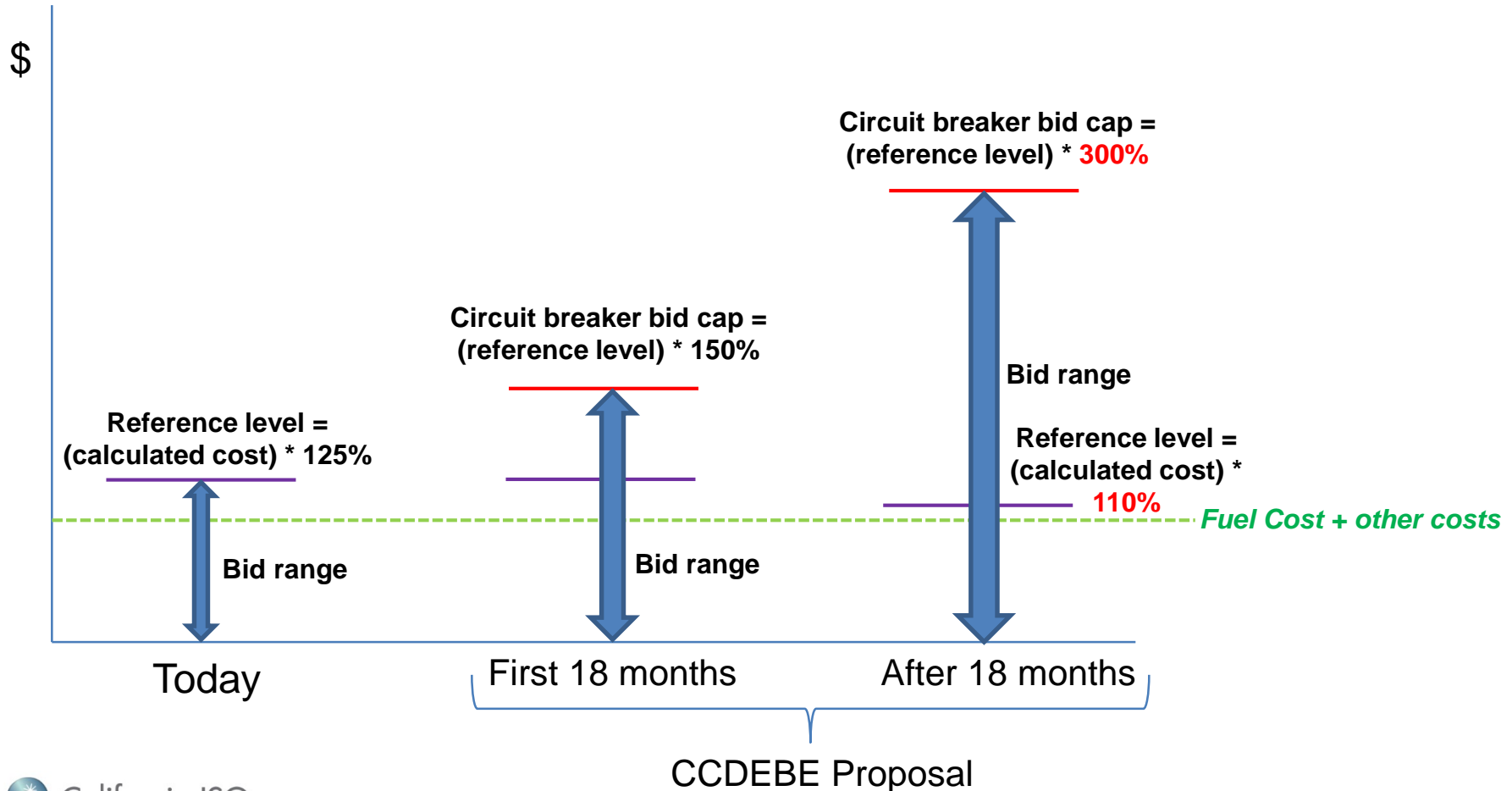
Proposal enhances suppliers ability to accurately reflect commitment costs (2 of 2)

- Provides for suppliers to request adjustments to reference levels before the market runs
- Provides for after-the-fact recovery of costs that could not be verified before the market runs
- Changes minimum load bids from daily to hourly

Commitment costs local market power mitigation test run in every market commitment process for every interval

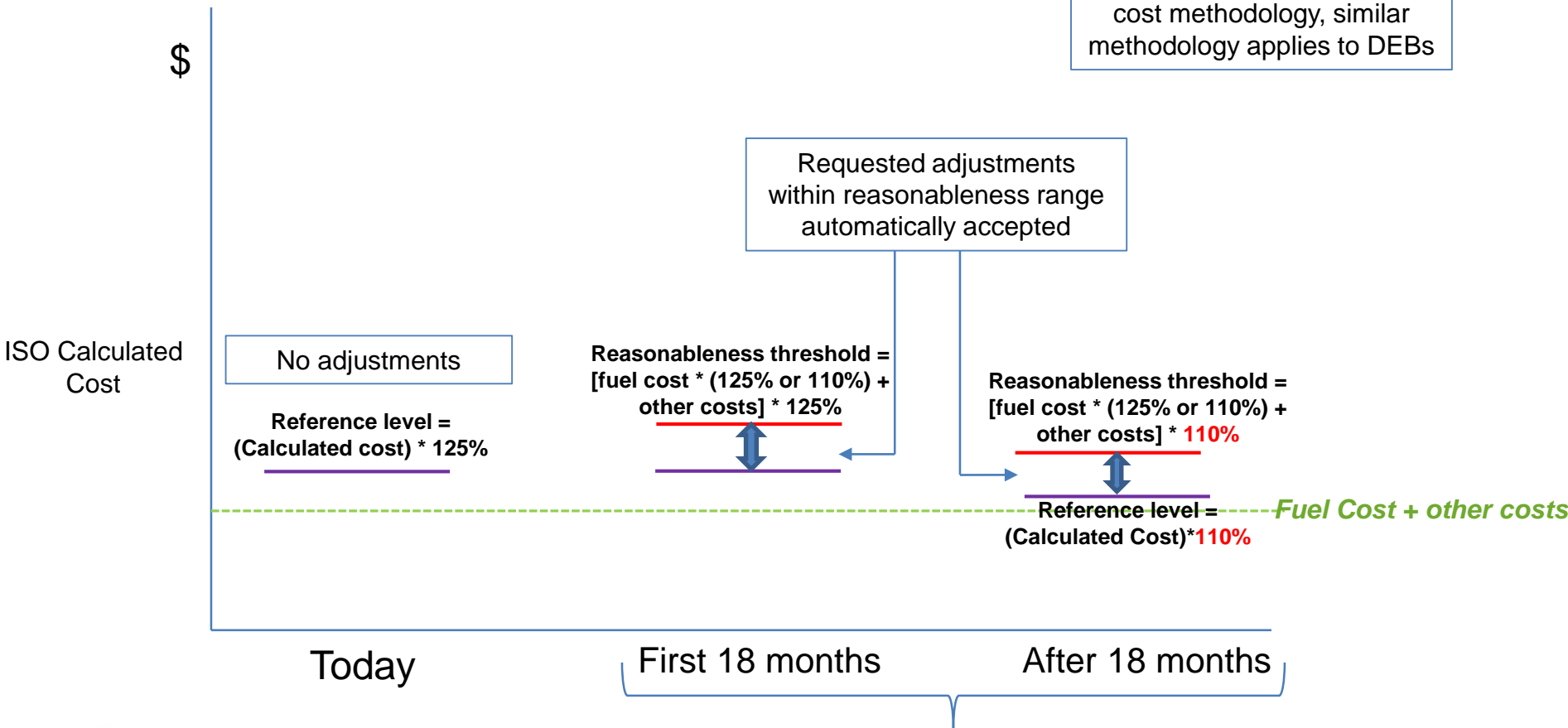


Proposal phases-in commitment cost bidding flexibility to ensure local market power mitigation is properly functioning

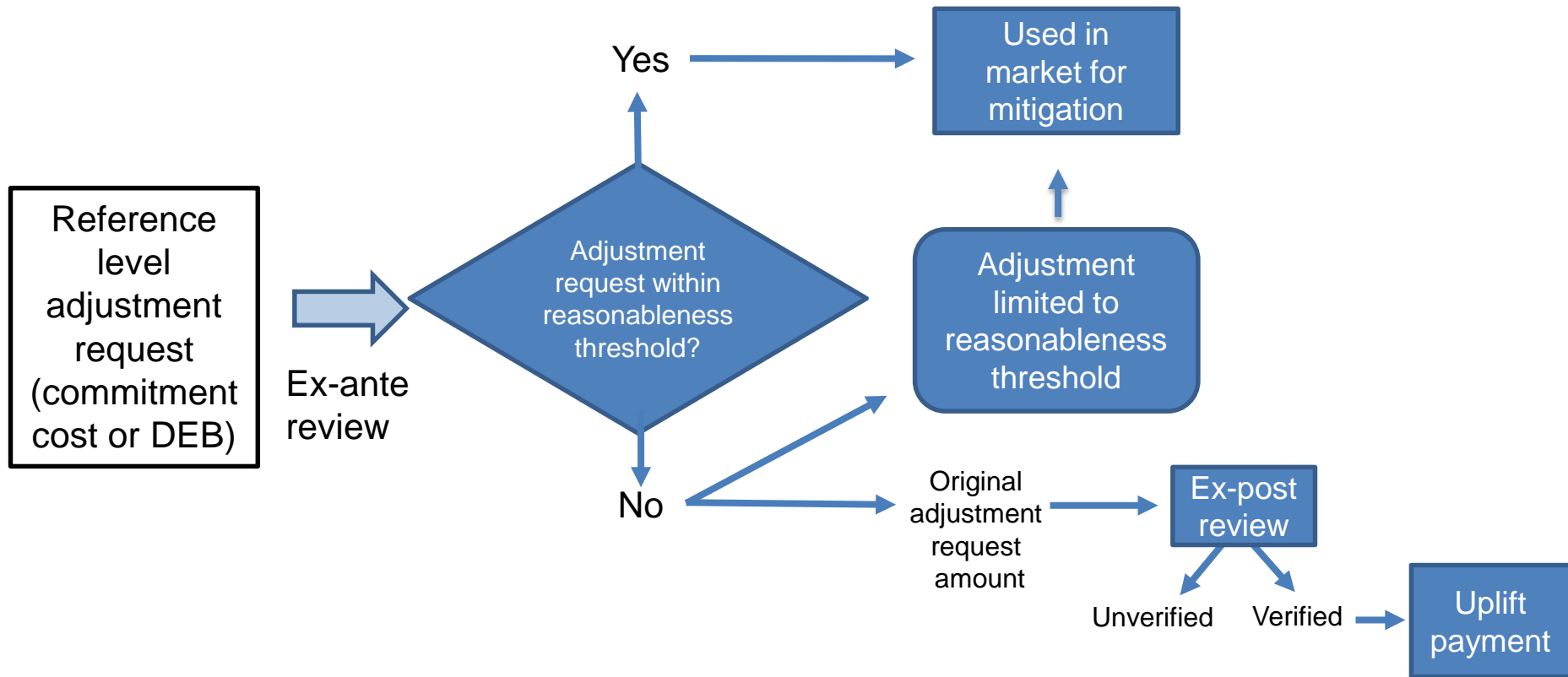


Proposal will allow for suppliers to seek adjustments to their reference levels based on changes in documented costs

Chart illustrates commitment cost methodology, similar methodology applies to DEBs



Reference level adjustment process



Proposal complies with FERC Order No. 831

- Raises energy bid cap to \$2,000/MWh for verified costs
- Re-calibrates market constraint relaxation parameters to be consistent with increased bid cap
- Provides for after-the-fact cost recovery for costs that cannot be verified before market close

Stakeholders are divided on the balance between allowing suppliers to accurately reflect costs versus protecting against market power (1 of 2)

- ISO's Market Surveillance Committee, EIM Participants, Generators, Environmental Defense Fund strongly support proposal or maintain it still does not offer enough bidding flexibility
 - Bid validation criteria and commitment costs circuit breaker caps strike a reasonable balance or are still too conservative
 - Proposal should be implemented immediately

Stakeholders are divided on the balance between allowing suppliers to accurately reflect costs versus protecting against market power (2 of 2)

- DMM and California IOUs do not agree with several aspects of the proposal because they believe it could result in increased costs
 - Bid validation criteria and commitment costs circuit breaker caps provide too much headroom
 - ISO should update gas price index used in real-time market based on ICE “same-day” gas trading information
 - Commitment cost market power mitigation should be tested before implemented

In summary, the proposal provides a number of benefits and complies with FERC Order 831

- Improves market efficiency by better incorporating actual costs into the market
- Ensures suppliers can recover actual costs that were limited in the market
- Encourages market participation by not limiting cost recovery
- Has sufficient safeguards to protect against market power