

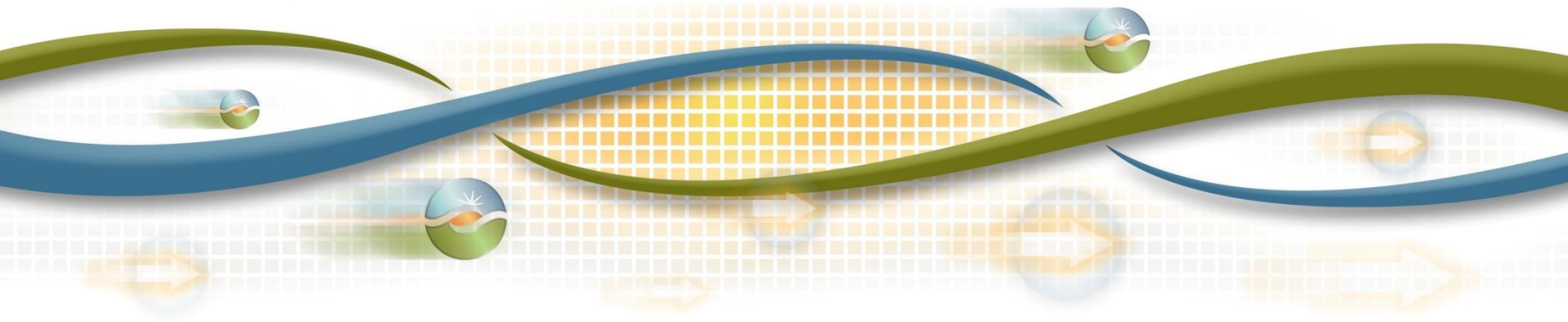


Commitment Cost Enhancements Phase 3 Board follow-up workshop

Kallie Wells

Market Design and Regulatory Policy

June 15, 2016



Acronyms:

CCE3	Commitment Cost Enhancements Phase 3
DEB	Default energy bid
DRAM	Demand response auction mechanism
DR	Demand response
IOU	Investor owned utility
LRA	Local regulatory authority
PDR	Proxy demand resource
RA	Resource Adequacy
RAAIM	Resource adequacy availability incentive mechanism
RDRR	Reliability demand response resource
RSI1	Reliability Services Initiative Phase 1

Agenda

Time	Topic	Presenter
10:00 – 10:10	Introduction	Kristina Osborne
10:10 – 10:45	<ul style="list-style-type: none">• PDR under CCE3	Kallie Wells (CAISO)
10:45 – 11:30	<ul style="list-style-type: none">• RAAIM treatment• DR programs/contracts• Max daily start limitations• DR annual limitations	Nora Sheriff (CLECA) Melanie Gillette (Enernoc)
11:30 – 11:45	<ul style="list-style-type: none">• DRAM contract overview	Rachel McMahon (CPUC – DR)
11:45 – 12:15	<ul style="list-style-type: none">• DR commitment costs• DR program limitations• Outstanding CCE3 questions• Other DR challenges	Gigio Sakota (SCE) Raymond Johnson (SCE)
12:15 – 1:15	Lunch	
1:15 – 1:30	<ul style="list-style-type: none">• Storage contract overview	Gabe Petlin (CPUC – Storage)
1:30 – 2:00	<ul style="list-style-type: none">• Storage contract concerns• Outstanding questions for storage	Alex Morris (CESA)
2:00 - 3:45	Interactive discussion	Kallie Wells and Delphine Hou (CAISO)
3:45 – 4:00	Wrap-Up and Next Steps	Kristina Osborne

Scope and goal of today's workshop

- ISO committed to work with demand response and storage community to address outstanding concerns with CCE3 as approved by the Board.
- Overview of proxy demand response model under CCE3 followed by panel discussions on outstanding concerns.
- Goal: Discuss concerns and prerequisite questions that need to be addressed, and determine most appropriate avenue for addressing.
- Work product: Based on stakeholder comments, ISO will create an action plan to address each concern identified.

Proxy demand response (PDR) resources under CCE3

- Market based maximum daily starts
 - Clarification on draft final proposal
- Change in resource adequacy availability incentive mechanism (RAAIM) treatment
 - Modification made via approved Board motion
- Revised use-limited definition and default designation
 - Clarification on draft final proposal
- Opportunity cost for commitment costs and DEBs
 - Clarification on draft final proposal and highlight necessary points of discussion.

Market based resource characteristics

- Market based maximum daily starts is subject to a minimum of 2 starts per day, with a few exceptions.
 - Design capability is only one start per day
 - Due to age of resource provided sufficient documentation and ISO approval.
- LRA approved PDR programs/contracts that set the availability parameters are considered to “design” the resource.
 - Therefore, PDR programs/contracts limited to a single event per day can have 1 start per day in Masterfile.

Change in Resource Adequacy Availability Incentive Mechanism (RAAIM) treatment

- Per RSI1, RA PDR resources are required to bid in accordance with the must offer obligation of the RA service being provided
 - Exempt from RAAIM when a limitation has been reached.
- Under CCE3, PDR will continue to be exempt from RAAIM when:
 - Daily and/or monthly limitation is reached,
 - Resource is required to take a “fatigue” break per DR program, and
 - Annual limitation is reached, **for an interim period to allow time for existing DR programs and contracts to reflect potential new cost.**
- After interim period, when annual limitation is reached:
 - Exempt from RAAIM for rest of month, non-exempt starting first day of subsequent month.
 - Annual limitation reached May 15th: exempt May 15 – May 31, non-exempt starting June 1 unless RA capacity is replaced.
 - Provides equal treatment to all RA resources

Revised use-limited definition

- Use-limited definition identifies resources that need the ability to reflect an opportunity cost in commitment cost bids and/or default energy bids (DEBs) due to acceptable limitations that extend beyond market optimization horizon.
- Resources will no longer default to use-limited status.
 - Hydro, PDR, RDRR, and participating load
 - Continue to be exempt from bid insertion and bid mitigation
- All resources, including PDR resources, **can obtain use-limited status if revised definition applies to the resources.**
 - **Go through the use-limited registration process.**
 - LRA approved DR programs/contracts that set the availability parameters of PDR resources are considered a design limitation.
 - Discussion today will help determine if PDR resources *need the ability to reflect an opportunity cost*, and thus use-limited status, or if other methods for rationing starts are more appropriate.

Opportunity costs in CAISO markets

	Conventional generator	Use-limited conventional gen	Demand response (Proxy Demand Response)
Availability	24/7	Based on use-limitations	<ul style="list-style-type: none"> Based on CPUC DR requirements (3 consecutive days, 4 hours/day, 24 hours/month) Other limitations?
Commitment costs?	Start-up and minimum load costs	Start-up and minimum load costs	Start-up and minimum load costs <i>(available but CAISO has not seen registration of these costs)</i>
Commitment cost subject to market power mitigation?	Yes, bid up to 125% of proxy cost calculation	Yes, bid up to 125% of proxy cost calculation	No
Method of proxy cost calculation	Gas-fired has explicit formulaic cost components. (Tariff section 30.4.1.1.1)	Gas-fired has explicit formulaic cost components. (Tariff section 30.4.1.1.1)	Non-gas-fired is less formulaic, may have ability to reflect opportunity cost under current construct (Tariff section 30.4.1.1.2)
Energy costs subject to market power mitigation?	Yes	Yes	No
CAISO to calculate opportunity cost?	No, not use-limited	Yes, for commitment and energy bids because resource is subject to mitigation and opportunity cost is not included in proxy cost and/or DEB calculations	Not for energy bids. For commitment bids, to be determined based on discussion at workshop . . .

Topics/issues for discussion

- PDR programs/contracts
 - What is an appropriate time for changes in RAAIM treatment to be effective?
 - What types of limitations are specified in PDR programs/contracts and where do they originate from?
 - Will existing storage and PDR contracts be impacted by CCE3?
 - At what point (RFO, DRAM, other?) are storage resources identified to participate as PDR?
- What are the costs of PDR and does the current ISO cost structure, i.e. start-up, minimum load, and energy, align with those costs?
- What are potential methods for PDR resources to ration the limitations?
 - Reflect opportunity cost within current proxy cost methodology?
 - Explicit opportunity cost component in a modified proxy cost method?
 - Reflect opportunity cost in energy bids?
 - Other means?

Next Steps

- Stakeholder comments deadline on workshop discussion and issues matrix is July 1, 2016.
 - ISO will post issues matrix and comments template on the initiative webpage
 - Send comments to initiativecomments@caiso.com using comments template
- ISO will post a working action plan after consideration of comments, followed by a stakeholder call to discuss.