CCE3 Workshop

Issues Matrix and Next Steps

Next Steps

The ISO hosted a workshop on June 15th to follow-up on the commitment made at the March Board of Governor's meeting regarding outstanding concerns for demand response and storage resources with the Commitment Cost Enhancements Phase 3 (CCE3) initiative. During the workshop, market participants presented their outstanding issues and concerns regarding the various CCE3 elements, which was then followed by an interactive discussion of the issues. Due to time constraints, not all their concerns were addressed during the interactive discussion, specifically the concept of how proxy demand response (PDR) resources can reflect opportunity costs in commitment cost bids. Stakeholders also requested additional discussion around the use-limited registration process and use-limited outage cards for PDR resources, which will be implemented as part of the Reliability Services – Phase 1 (RSI1) initiative. Therefore, the ISO will host a subsequent stakeholder meeting to continue needed discussions. A proposed agenda is noted below.

During the workshop, ISO and stakeholders agreed the preferred method to optimally dispatch PDR resources, given the limitations that extend beyond the market optimization horizon, is for those resources to reflect opportunity costs in market bids. A potential methodology for reflecting opportunity costs in market bids will be the primary focus of the next meeting, starting with a discussion of the Board approved methodology in the CCE3 policy. During the discussion we intend to explore how the CCE3 methodology would work for PDR resources, or if there are other potential solutions.

Proposed agenda for next meeting:

- 1. Use-limitation data plan template (ULPDT)
- 2. Proxy cost methodology for commitment costs
- 3. CCE3 methodology for opportunity costs
- 4. Use-limited reached outage cards

Stakeholder Feedback

Given the additional discussions that need to occur, the ISO is no longer requesting formal written comments at this time on the workshop or issues matrix (included below). The ISO will seek formal written comments after the next stakeholder meeting. However, to better inform the discussions at the next stakeholder session, the ISO is seeking stakeholder feedback on specific items by July 6th to initiativecomments@caiso.com.

Items for feedback:

- 1. Proposed agenda topics
- 2. To better facilitate discussions on agenda item #1 and #3, please indicate if PDR resources have limitations other than events per month, events per year, run-hours per month, run-hours per year, and run-hours per event.
- 3. To better facilitate discussions on agenda item #1, please indicate what documentation can be provided to the ISO which would verify/validate the limitations of the PDR resource for the four types of supply side demand response (DR) (DRAM or pro forma contract DR, Third party direction participation, Utility DR Programs, and Utility aggregator-managed programs).
- 4. To better facilitate discussion of agenda items #1 and #3, please indicate if storage resources operating as PDR resources in the ISO markets have any other limitations in the PDR programs than traditional DR resources.

Below is an estimated timeline for when various initiatives will become effective, and is only intended better facilitate discussions on the impacts of CCE3 relative to pre and post RSI1 implementation.

Estimated Timeline

	RSI1	CCE3 - interim period	CCE3 - post interim period
Estimated effective dates	Nov 2016 - Jan 2018	Jan 2018 to TBD time in 2018. Note that CCE3 implementation has been delayed to Fall of 2017. Therefore the first set of opportunity costs and change in RAAIM treatment will be effective January 1, 2018.	TBD time in 2018 onward
Use-limited status	Default UL	Obtain UL status	Obtain UL status
Commitment costs	Can submit	Can submit	Can submit
Outage cards	Available to manage limitations, reflect fatigue breaks, and reflect when resource has been exhausted.	Available to manage limitations, reflect fatigue breaks, and reflect when resource has been exhausted.	Available to reflect fatigue breaks and when resource has been exhausted.
RAAIM treatment	Exempt when appropriate outage card submitted	Exempt when appropriate outage card submitted	Exempt for remainder of month when no longer available. Non-exempt starting first day of following month unless another RA resource provided.

Bid Insertion	No (DR and NGR are exempt)	No (DR and NGR are exempt)	No (DR and NGR are exempt)
Bid Mitigation	No (DR and NGR are exempt)	No (DR and NGR are exempt)	No (DR and NGR are exempt)

Issues matrix – in progress

					Is issue res	olved today	?	
			If yes, how?	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
1	CLECA If the RAAIM and obligation for replacement is in the tariff, the current exemption should be in the tariff as well.	The Board approved motion provides for an interim period, during which the RAAIM treatment as provided under RSI 1 will be extended until a predetermined date in 2018. CAISO clarifies that with RAAIM exemption during the interim period, there is no obligation to provide additional RA capacity once the resource has been exhausted. Need specific date (based on full bifurcation). Stakeholders to comment on this date, including deadlines to provide information to CPUC.			Can consider putting specific time in tariff language			

					Is issue reso	olved today	?	
			If yes, how?	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
2	CLECA, CPUC Program/Tariff/Contract which defines the "resource" could limit it to one event per day. How does this align with CCE3 policy which provides an exception to the minimum of two starts per day if the design capability value is one per day?	calso agrees that reflecting one start because that is the program limitation is aligned with cce3 policy. Stakeholders to provide comments on the documentation that can be provided to the Iso showing the program limitation(s).			Can consider putting specific language in tariff	Can consider putting specific languag e in BPM		
3	CLECA PDR and RDRR should continue to be exempt from bid insertion and bid mitigation.	This is existing policy and continues under CCE3.	Yes. Existing tariff and under RSI		Will include specific language in tariff	Will include specific languag e in BPM		
5	SCE Can DR Resources apply for, and receive ULR status? What criteria would CAISO use?	Yes, can apply for use- limited status per CCE3 policy. See Agenda item #1	Yes. Aligned with current CCE3 policy.		Will clarify a non-ULR can apply for ULR status	Data needed to qualify for ULR should be detailed in BPM		

					Is issue res	olved today	<i>i</i> ?	
			If yes, how?	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
6	SCE DR resources generally have limited number of calls (not MWh), hence the opportunity cost is a per call/hour (not per MWh) cost. How would the CAISO calculate the opportunity costs for DR ULRs? What is the methodology the CAISO would use? (Or would it defer to the SC?) How would the CAISO track the resource use?	The PDR model currently allows for a 3 part bid: energy (\$/MWh), start (\$/start), and minimum load (\$/MWh). For DR, a "call" may be the same as a start. Determining the methodology to be used, or deferring to the SC, is open Agenda item #3. Resource usage (availability, must offer obligations) are tracked via use plans per RSI policy. See #5		Can clarify that PDR has 3 part bid. A call may be the same as a start.				Proposed agenda item #3.

			Is issue resolved today?						
			If yes, how?	If not, sele	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO	
7	SCE and CPUC How will the ISO optimize or allocate the use of these resources with limitations through new market design? How will the CAISO market optimize the use of storage resources?	Reflecting opportunity costs in commitment cost bids for PDR resources, including storage participating as PDR, will enable the market to optimally allocate the limitations over the limitations horizon (e.g, year). See Agenda item #3 Optimizing storage resources that participate as NGR is a continued effort under ESDER initiatives.					ESDER must first evaluate limitation s of storage resources in NGR model.	Proposed agenda item #3.	
8	SCE Currently, RDRR cannot have economic bids in real-time.	While the ISO appreciates this concern being raised, this is a topic outside the scope of issues addressed under CCE3.	Yes, out of scope.						

			Is issue resolved today?					
			If yes, how?	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
9	CPUC If RAAIM penalties are stayed for the interim period, are there other problems that could arise with bidding in storage resources under PDR between now and 2018? CPUC	Stakeholders to specifically identify any issues for bidding in storage during the interim period due to CCE3.	Yes.			Clarificat		Proposed
	What would the contractual remedy be if a resource is dispatched more hours or started more times than what is provided for in the contract between the IOU and generator?	outside the business functions of the ISO. When a resource reaches the limitation, a use-limited reached outage card can be submitted and not be dispatched beyond the start and/or run hour limitation(s). Note that CCE3 will provide DR resources access to similar outage cards if no longer use-limited.	Aligned with CCE3 policy.			ion on reasona ble use of the outage cards will be docume nted in BPM.		agenda item #4.

			Is issue resolved today?						
			If yes, how?	If not, sele	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO	
11	CPUC How will storage resources with existing PDR contracts (that go beyond 2018) ensure that they will not face significant RAAIM penalties after 2018 from the expectation that they are always available (inconsistent with their contracts)? Can ISO estimate how many hours of availability per month are generally expected?	To avoid RAAIM penalties after 2018, substitute capacity should be provided when the storage resource is no longer available, and the storage resource should no longer be shown on subsequent monthly RA showings. Stakeholders to elaborate on the analysis request.	Yes, current policy under RSI1 to avoid RAAIM penalties.						

			Is issue resolved today?					
			If yes, how?	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
14	CPUC and CESA How to address RA replacement risk under CCE3	Post interim period, reflecting an opportunity cost in commitment cost bids will enable optimal use of the resource. See agenda item #3. If the resource has been exhausted, it submits a uselimited reached outage card. At that point, additional RA capacity must be provided before the first day of the following month, or be assessed under RAAIM.	Yes. ISO has provided an interim period during which the risk is delayed, allowing time for PDR providers to determine which party will assume risk.					Proposed agenda item #3.
17	CESA Should resources have the ability to represent cycling limitations if they so choose?	ISO seeks clarification if this issue is specific to NGR or both NGR and PDR.						

					Is issue res	olved today	<i>י</i> ?	
			If yes, how?	If not, select potential avenue(s) for resolution				
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
18	CESA Do Path A (opp cost) and Path B (outage cards) yield same ability for a resource to manage over-cycling and other use-limits.	Path A is the optimal solution to managing limitations of a resource. Path B would be a suboptimal use of the resource as the SC would determine the most valued time for the resource to participate as opposed to the market determining optimal use. See Agenda items #3 and #4.	Yes, provided discussion at the workshop indicating Path A is optimal and to be used in combinati on with outage cards (Path B).					See proposed agenda items #3 and #4.
20	CESA If LSE is Scheduling Coordinator for PDR/NGR, is RAAIM penalty exposure to the resource avoided?	No. RAAIM is assessed on a resource level. The SC of the resource is then responsible for the penalty to the CAISO.	Yes, provided clarificatio n.					
21	CESA Can NGRs and PDRs manage commitment and opportunity costs?	Discussions for NGR are taking place under ESDER initiatives. See agenda item #3 for PDRs.						Proposed agenda item #3.

				Is issue resolved today?					
			If yes, how?	If not, sele	ect potential	avenue(s)	for resolution	1	
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO	
22	SDGE Consideration of modeling PDR resources as VERs.	The ISO appreciates the continued discussion of how to appropriate model PDR resources. The ISO would need to better understand how the VER model would work for PDR. However, at this point, this topic is not directly related to issues due to CCE3.	Yes, out of scope but seek additional input from stakehold ers.						
23	SDGE Reactivation of maximum run hour resource characteristic.	The ISO will continue to evaluate the need to reactivate the maximum run hour resource characteristic field as we continue discussions on opportunity cost methodologies. See Agenda Item #3.						Proposed agenda item #3.	

			Is issue resolved today?					
			If yes, how?	If not, sele	ect potential	avenue(s)	for resolutior	1
#	Source Issue statement	CAISO clarification		Current BPM	CCE3 tariff	CCE3 BPM	ESDER 2	Other CAISO
24	Several stakeholders requested clarification on the use-limitation registration process for PDR resources.	The use-limited registration process was evaluated, and most recently enhanced, under RSI1. The ISO has posted draft BPM language providing clarification on the registration process. See PR 887 for the most recent information on the registration process. See Agenda item #1.	Yes, draft BPM language already posted for Stakehold er review under PR887					Proposed agenda item #1.
25	Several stakeholders requested clarification on how PDR resources use the Use-limited reached nature of work attributes.	The use-limited reached nature of work attributes for generation outages were developed under RSI1. CCE3 is modifying the RAAIM treatment associated with the outages, not the outages themselves. See Agenda item #4.				Can consider includin g reasona ble use of the outage cards in the BPM languag e for CCE3.		Proposed agenda item #4.