# CCE3 July 27th Workshop

## **Issues Matrix and Next Steps**

### **Next Steps**

The ISO will review submitted comments and incorporate those comments into an action plan. The action plan will identify how and where each of the issues noted in the issues matrix below will be addressed. To the extent any issues require avenues outside of the CCE3 tariff stakeholder process and CCE3 implementation phase, which includes BPM changes, additional actions may be required by the ISO or other entities. The ISO will then hold a stakeholder call to discuss the action plan.

#### Stakeholder Feedback

Please submit written comments on the issues matrix below, the discussion held at both workshops (June 15<sup>th</sup> and July 27<sup>th</sup>), as well as any additional comments you may have, by August 10<sup>th</sup> to initiativecomments@caiso.com.

Note that in the CAISO comments row of the Issues Matrix, the ISO poses questions to stakeholders as well.

During the presentation at the July 27<sup>th</sup> workshop, the ISO posed specific questions for stakeholder feedback, which are noted below. You may refer back to the presentation slides for more context around each question. The term PDR refers both to demand response and storage backed PDR.

Specific items for Stakeholder Feedback:

- 1. What types of documentation exists that can be provided to the ISO which supports the limitations of each PDR resource in the Use-Limit data plan template (ULPDT)? This documentation will be used to verity the limitations of the resource.
- 2. What are the demonstrable costs for PDR resources that may would be analogous to a start-up or minimum load cost of a traditional generator? What costs would be included in the energy bid?
- 3. Should there be a lower bound of the net benefits test on the energy cost used in the opportunity cost model?
- 4. Are there other resource characteristics for PDR we should include in the opportunity cost model?
- 5. Can all limitations be captured by the types and granularities noted at the workshop?
- 6. Are there any other concerns regarding the CCE3 methodology to estimate opportunity costs for PDR resources?

# **Issues matrix**

|   |  |  | Is issue resolved today?                           |                                    |  |             |         |       |
|---|--|--|--|------------------------------------|--|-------------|---------|-------|
|   |  |  | Resolution status                                  | Potential avenue(s) for resolution |  |             |         |       |
| # | Source<br>Issue statement  | CAISO comments   |  | Current<br>BPM                     | CCE3<br>tariff   | CCE3<br>BPM | ESDER 2 | Other |
| 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.  Stakeholders to comment on this date, including deadlines to provide information to CPUC. | Pending<br>stakehold<br>er<br>feedback<br>on date. |                                    | Consider putting specific time in tariff language during the Stakehol der Tariff Languag e process schedule d to commenc e in late summer/early fall 2016. |             |         |       |

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| 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? | CAISO agrees that reflecting one start because that is the program limitation is aligned with CCE3 policy.  Note: Stakeholders to provide comments on the documentation that can be provided to the ISO showing the program limitation(s) to include in the BPM details. | Resolved.         |                          |  | Can<br>consider<br>putting<br>specific<br>languag<br>e in<br>BPM |         |       |  |
| 3 | CLECA PDR and RDRR should continue to be exempt from bid insertion and bid mitigation.   | This is existing policy under RSI1 and continues under CCE3.   | Resolved.         |                          | Will include specific language in tariff | Will include specific languag e in BPM                           |         |       |  |

|   |  |  |                   |                                    | Is issue res                                    | olved today   | ?       |       |
|---|--|--|-------------------|------------------------------------|---|---|---------|-------|
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| # | Source<br>Issue statement  | CAISO comments   |                   | Current<br>BPM                     | CCE3<br>tariff                                  | CCE3<br>BPM   | ESDER 2 | Other |
| 4 | 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.  Criteria would be the revised definition of Use- limited status, recognizing performance criteria in PDR programs/contracts would be considered a design limitation. See Agenda item #2 for feedback regarding documentation that would be used to support use- limited status. | Resolved.         |                                    | Will clarify a non-ULR can apply for ULR status | Criteria<br>and data<br>needed<br>to<br>qualify<br>for ULR<br>will be<br>detailed<br>in BPM |         |       |

|   |   |  |   |   | Is issue reso   | olved today   | ?       |       |
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| 5 | 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?) | 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.  The ISO would use the CCE3 opportunity cost model to estimate opportunity costs for use-limited PDRs. | Pending<br>stakehold<br>er<br>feedback. | Can clarify that PDR has 3 part bid. A call may be the same as a start. | Will include description of opportunity cost methodology. | Will include details on the opportu nity cost methodo logy. |         |       |
|   | How would the CAISO track the resource use?   | Resource usage<br>(availability, must offer<br>obligations) are tracked via<br>use plans per RSI policy.   |   |   |   |   |         |       |

|   |   |  |  |                | Is issue reso   | olved today   | ?   |  |  |
|---|---|--|--|----------------|---|---|---|--|--|
|   |   |  | Resolution status  |                | Potential avenue(s) for resolution                        |   |   |  |  |
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| 6 | SCE and CPUC How will the ISO optimize or allocate the use of these resources with limitations through new market design? | 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). | Pending<br>stakehold<br>er<br>feedback<br>on<br>opportunit<br>y cost<br>methodolo<br>gy. |                | Will include description of opportunity cost methodology. | Will include details on the opportu nity cost methodo logy. | ESDER<br>must first<br>evaluate<br>limitation<br>s of<br>storage<br>resources<br>in NGR<br>model. |  |  |
|   | How will the CAISO market optimize the use of storage resources?  | Optimizing storage resources that participate as NGR is a continued effort under ESDER initiatives.  |  |                |   |   |   |  |  |
| 7 | 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.   | Resolved.  |                |   |   |   |  |  |
| 8 | SCE How does the CCE3 policy apply to RDRR that can submit economic bids in day- ahead?                                   | The ISO will provide clarification on how CCE3 applies to RDRR that can submit economic bids in the day-ahead market.  | Pending.   |                |   |   |   | Provide clarificatio n in the action plan. |  |

|    |   |  | Is issue resolved today?                              |                                    |                |   |         |       |
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| 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?          | Stakeholders to specifically identify any issues for bidding in storage during the interim period due to CCE3.   | No<br>additional<br>issues<br>raised at<br>this time. |                                    |                |   |         |       |
| 10 | CPUC 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? | Contractual remedies are 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. | Resolved.   |                                    |                | Clarificat ion on reasona ble use of the outage cards will be docume nted in BPM. |         |       |

|    |  |  | Is issue resolved today? |                                    |                |             |         |   |
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| 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)? | Storage backed PDR is not required to perform beyond the PDR program specifications. When the resource is no longer available, RSI1 policy provides resources the ability to avoid RAAIM penalties by providing substitute capacity, and the storage resource should no longer be shown on subsequent monthly RA showings.  Which entity takes the responsibility for the RAAIM penalties or cost of replacement is outside the business functions of the ISO. | Pending.                 |                                    |                |             |         | CPUC or contractin g entities to determine who assumes the penalties or cost of replacem ent. |

|    |  |   |                   |                                    | Is issue res   | olved today | /?      |   |
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| 12 | CPUC and CESA<br>How to address RA<br>replacement risk under<br>CCE3                       | Post interim period, reflecting an opportunity cost in commitment cost bids will enable optimal use of the resource.  If the resource has been exhausted, it submits a use-limited 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. | Resolved.         |                                    |                |             |         | CPUC or contractin g entities to determine who assumes the penalties or cost of replacem ent. |
| 13 | 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.   | Pending feedback. |                                    |                |             |         |   |

|    |  |   |                   |                | Is issue reso  | olved today | ?             |       |
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| 14 | 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. | Resolved.         |                |                |             |               |       |
| 15 | 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.   | Resolved.         |                |                |             |               |       |
| 16 | CESA Can NGRs and PDRs manage commitment and opportunity costs?  | Discussions for NGR are taking place under ESDER initiatives.  PDR resources can have and bid commitment costs if they have demonstrable start-up and/or minimum load costs, and/or an opportunity cost adder.  | Resolved.         |                |                |             |               |       |

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| 17 | SDGE<br>Consideration of<br>modeling PDR<br>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. | Resolved.         |                |                                    |             |         |       |  |
| 18 | SDGE<br>Reactivation of<br>maximum run hour<br>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.   | Pending.          |                |                                    |             |         |       |  |

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| 19 | 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.  During the workshop discussions, a few modifications were suggested on the use-limit plan data template. | Resolved.         | PRR<br>887<br>discusse<br>s the<br>registrati<br>on<br>process<br>and<br>ULPDT<br>for RSI1<br>impleme<br>ntation. | Consider updates to the ULPDT for PDR resource to accommo date timing of annual ULPDT process and PDR program construct. | Provide addition al clarificati on as the registrati on process and ULPTD pertain to PDR. |         |       |  |

|    |  |   |                   | Is issue resolved today? |                                    |  |         |       |  |
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| 20 | 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.  ISO provided additional clarification at the most recent workshop regarding the various nature of work attributes for PDR resources. | Resolved.         |                          |                                    | Can consider includin g reasona ble use of the outage cards in the BPM languag e for CCE3. |         |       |  |