Submitted by: Meredith Younghein, Rachel McMahon, July 6th 2016

CPUC Staff appreciates that CAISO held this workshop on CCE 3 issues in response to the requests made by Commissioner Florio in his letter to CAISO management in March and expects to continue to closely collaborate with CAISO on the issues raised in that letter.

Feedback on proposed agenda for the next Stakeholder Workshop

CPUC Staff would like to provide some more details on topics that we think should be covered at the next workshop on CCE 3 issues.

<u>Topic 1</u>) use-limited resource (ULR) status and template: it is not enough for CAISO and stakeholders to discuss the template for ULRs at the next workshop, rather, the workshop should walk stakeholders through the existing/new requirements to qualify for ULR status, and, stakeholders should discuss whether or not the existing requirements need to be updated or clarified to ensure that all DR and Storage resources will be able to qualify. The next step would be to hold a formal workshop, along with individualized assistance as needed, to help scheduling coordinators understand the template and process for applying. At the workshop, CAISO staff stated that they would take into consideration documentation articulating a resource's use limitations, and specifically stated that a contract or a program tariff that articulates a use-limitation would be taken into consideration.

The issues matrix references a new proposed BPM change, PR 887. We are unclear as to when this change was first proposed, and if that was done in response to the CCE 3 stakeholders. Upon review of PR 887, we note that PR 887 discusses gas fired resources, hydro, wind, QF resources, solar and nuclear, and contains no information specific to DR or storage. We find the following quote within the text of the PRR "As with annual Use-Limited Resource status, a contractual limitation or economic reason will not qualify a Resource Adequacy Resource for temporary environmental Use-Limited Resource status." (page 4) While the contractual or tariff limitation on DR or storage would most likely not constitute an "environmental limitation", it is notable that this sentence is the only mention of the use of a contract to justify use limitations, and appears contrary to the presentation by staff at the workshop. Therefore, recommend that the workshop review the draft PR 887 language, explain how it is intended to apply to non-generating resources, and allow stakeholders to comment on its sufficiency, including any amendments to the PRR that are specific to DR and storage.

Topics 2) and 3) Proxy cost methodology for commitment costs and CCE 3 methodology for opportunity costs: The workshop needs to begin by explaining what, under current CAISO rules, and the CCE 3 tariff amendments (if adopted by FERC), can be included in a proxy cost and an opportunity cost bid. CAISO should begin by explaining how the new opportunity cost methodology *applies* to non-generating resources such as DR and Storage. On the face of the method (contained in an appendix to the Final CCE 3 Straw Proposal) none of the costs seem to apply to demand response or storage resources. CAISO suggests that PDR bids already have a place for \$/start costs to be reflected as well, which seems outside either of these two other methods (see Issue # 6). At the workshop, we recommend walking through all of these methods and giving examples of the types of costs that a non-generator could reflect that CAISO would find acceptable. After the workshop, an additional BPM process may be

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appropriate to help determine BPM guidelines for both of these cost methods for non-generating resources and to clarify the PDR model and what is allowable.

<u>Topic 4) Use-limited reached outage cards:</u> It became clear from the workshop that stakeholders and CAISO lack a clear understanding of what outage cards will be available to resources like demand response and storage after the implementation of RSI 1. Please see our comments below for further detail on what we think needs further, and more complete, explanation and discussion at the workshop, and what should be written into tariff and/or BPM language, as needed.

Comments on the CCE 3 Workshop Issues Matrix

RAAIM "Treatment" during interim period (Issue # 1)

"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." CAISO asked for stakeholders to comment on the date when the interim period could end. It is our understanding that, when the interim period ends, all ULRs will be liable for RAAIM penalties for any month when they are unavailable and for which they have not provided replacement capacity, unless CAISO develops a new "annual" outage card that demand response and storage resources could use after their annual start limitations are exhausted. CAISO seems to assume that replacement cost can be accounted for in design of the new DR program tariffs and contracts, including DRAM contracts. While this may be the case, it may also be that the CPUC finds this additional ratepayer cost for DR programs and contracts to be no longer meet cost-effectiveness criteria, or otherwise excessive and unreasonable. While we appreciate the exemption from RAAIM penalties for 2017 to account for the DRAM and IOU DR programs, there is a very short window in which to redesign contracts and tariffs for the 2018 program year. As stated at the workshop, the 3rd pilot of the DRAM is being designed now, and its design must be completed, along with contact provisions before IOUs file an advice letter with the Energy Division on September 1st of THIS year, per CPUC Decision (D.) 16-06-029. Time is of the essence.

The date for the "interim period" that has been discussed is some point in 2018. This will not help Storage resources, with existing CPUC approved contracts. Under the new rules, we now understand them, these resources will have to either replace their capacity if they run through their number of starts (or run hours for the month or year) unless an annual outage card is provided that CAISO will honor without penalizing these resources or requiring replacement. This is a significant cost that was not contemplated when these storage contracts were entered into and approved by the CPUC.

Outage Cards (Issues # 1, 10, 11, 25)

While not specifically covered in the Issue Matrix, there was significant discussion at the workshop about the specifics of outage cards developed under RSI 1 (but not yet implemented) and which of these outage cards could be used by ULRs during, and after, the interim period. There seemed to be significant confusion and disagreement internally at CAISO regarding the outage cards available after RSI 1 implementation and after CCE 3 implementation. At the workshop, participants discussed the

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following types of outage cards: those for temporary "fatigue" breaks, which could be used when a daily or monthly limitation is reached, and those that could be used for a longer period, such as when an annual limit is reached. Workshop attendees seemed to reach the conclusion that RSI 1 did not create such a "long term" outage card for use-limited resources. This is probably because it was not necessary to do so, because RSI 1 contemplated use-limited resources keeping their status, and submitting useplans.

Although not discussed at the workshop, a new CAISO process appears to be developing an annual outage card through a BPM change (877). We are unsure as to when this BPM change was developed or proposed, and, at the time of the workshop on June 15th none of the workshop participants were aware of this proposed change. It was certainly not discussed at the time the CCE 3 proposal was considered by CAISO's Board back in March.

CAISO also said at the workshop that when a resource has hit its annual limit, it should <u>not</u> be shown on subsequent month's use-plans (meaning it would need to be replaced for the rest of the year). If not replaced, it would get penalized under RAAIM. Then, in the issue matrix for # 10, CAISO says: "when a resource reaches a limitation, a use-limited outage card can be submitted and [the resource may/will?] not be dispatched beyond the start and/or run hour limitations. Note that CCE 3 will provide DR resources access to similar outage cards if no longer use limited."

We have a hard time understanding the many aspects of this "clarifying" statement and we think that CAISO needs to issue a written explanation regarding outage cards provided under RSI 1 that would apply to ULRs after RSI 1 and CCE 3 implementation, both during the "interim" period and after. Specifically: what is the use-limited outage card, and can it be used beyond a one-month period? What options will a use-limited resource have after the interim period? What is a resources' replacement obligation under RAAIM if an outage card is used, for the period covered by the outage cards? Also, as mentioned above, existing Storage contracts go far beyond 2018 and do not contemplate costly replacement costs if the use-limitations are reached.

Application for Use-Limited Resource (ULR) Status (Issue #5)

As discussed under our feedback on workshop topics, contrary to what is stated in the issues matrix, the issue of whether and how DR and Storage resources can apply for ULR status (and by which criteria their application will be evaluated) was not resolved at the workshop. The current BPM and CAISO published procedures are totally unhelpful in a) clarifying that DR and Storage should be able to qualify for ULR status after applying and b) clarifying how a ULR application will be reviewed, or what kind of documentation, data, etc, CAISO will deem relevant or sufficient when CAISO evaluates a ULR application.

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Calculating Opportunity Costs per call and not per MWh (Issue # 6)

CAISO "clarifies" in the issues matrix that a call could be the same as a "start" and that a PDR bid can have 3 parts, one of which is the \$/start. This is helpful, but needs to be further explained by CAISO, and then discussed by stakeholders. CAISO also states that "resource usage (availability, MOOs) are tracked via use plans per RSI policy." This is a very unhelpful statement because the use plans, which were in place when the RSI was adopted and filed with FERC, would now go away under CCE 3 implementation. Is there now a path forward for those resources, once deemed to be a ULR, to somehow keep their use plans or the option to indicate availability via a use plan? This was never discussed as an option either during the CCE 3 initiative or at the workshop. We are unclear as to what "use-plan" CAISO refers to in the issues matrix. Is CAISO contemplating that it would retain the practice of ULRs submitting use plans, which would then keep them outside the regular RAAIM system and exempt them from replacement requirements if their outage/ unavailability was consistent with their use plan?

Optimizing the Use of Storage Resources (Issues # 18, 21).

In its "clarification", CAISO states: "optimizing storage resources that participate as NGR is a continued effort under ESDER initiatives." This statement may be true in part, but, as CAISO manager Tom Flynn stated at the meeting, ensuring that storage resources aren't "over-used" (used inconsistently with their contract terms) is <u>not</u> currently a concern of ESDER Phase 2, and the issues discussed at this workshop are not in scope for ESDER 2. We found this statement to be very concerning and discouraging given the close working relationship our agencies have had on Storage integration issues. If CAISO has created challenges for Storage resources through the CCE 3 initiative, then, it should be obligated to mitigate these challenges in ESDER, when there is the opportunity to do so in an open stakeholder process.

Market Optimization of Use-Limited Resources, specifically DR and Storage (Issues # 10, 14, 21)

CPUC Staff's presentation at the workshop began with quotations from the RSI 1 final proposal to the CAISO board, which discussed CAISO's need to develop further methods to optimize use-limited resources in the CAISO energy markets, recognizing that current methods are insufficient. Because CAISO has not yet done this, and has not even begun a stakeholder process to focus on how the market should optimize the use of resources with limited number of starts or run-hours during the year, CAISO should not be further changing the rules around use-limited resources.

Because the CAISO market cannot currently optimize the use of resource start's during the calendar year, a resource with a limited number of starts faces a real risk of running out of starts before the end of the year, or during the time for which it was contracted as an RA resource and expected to be shown on an RA supply plan. If the CAISO could develop a method for optimizing dispatches throughout the year, many of the issues created by CAISO's implementation of CCE 3 for DR and Storage resources could be avoided and resolved. To date, CAISO has not made a commitment to doing this, other than the commitment implied in the final RSI 1 board documents.

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In the issues matrix, CAISO states that "post interim period, reflecting an opportunity cost in commitment cost bids will enable optimal use of the resource." CPUC Staff is uncertain that an opportunity cost, based on the board-adopted methodology (contained in the CCE 3 appendix) will be sufficient to optimize a resource with a limited number of annual starts.

The issues matrix also confirmed that CAISO would require replacement of storage resources that run through their number of starts before the end of the year. This should only happen if CAISO's market optimization methodology is insufficient. This needs to be further analyzed and tested during an interim period before RAAIM penalties and replacement requirements would apply.

CAISO also says that the interim period will "allow time for PDR providers to determine which party will assume the risk." This is not a resolution and is not acceptable. These are existing, CPUC approved contracts, which were entered into with a specific understanding of *existing* risks and costs. Expecting a storage provider to find replacement capacity was likely never contemplated at the time these contracts were signed and approved.