Attachment A

Stakeholder Process: Commitment Cost Bidding Improvements

Summary of Submitted Comments

Two stakeholder initiatives are consolidated into one memo as both propose market improvements to ISO treatment of commitment costs.

Stakeholders submitted four rounds of written comments to the ISO under the Commitment Cost Enhancements Phase 3 stakeholder initiative on the following dates:

- Round One (comments following technical workshop session), 07/20/15
- Round Two (comments Straw Proposal), 9/8/15
- Round Three (comments on Revised Straw Proposal), 11/23/15
- Round Four (comments Draft Final Proposal), 3/2/16

Stakeholders also submitted comments on the opportunity cost model as part of the Commitment Cost Enhancements and Commitment Cost Enhancements Phase 2 stakeholder initiatives. They also submitted comments on the revised "use-limited resource" definition as part of the Commitment Cost Enhancements Phase 2 stakeholder initiative.

Stakeholders submitted seven rounds of written comments to the ISO under the Bidding Rules Enhancements stakeholder initiative on the following dates:

- Round One (comments on Issue Paper), 12/30/14
- Round Two (comments on FERC Order 809 Filing Proposal), 05/06/14
- Round Three (comments on Straw Proposal), 05/13/15
- Round Four (comments on FERC Order 809 Filing Proposal), 05/27/15
- Round Five (comments on Revised Straw Proposal), 12/17/15
- Round Six (comments on Draft Final Proposal, Minimum Load Costs), 01/20/16
- Round Seven (comments on Draft Final Proposal, Generator Commitment Cost Improvements), 02/29/16

Stakeholder comments were received from:
California Department of Water Resources (CDWR), California Large Energy Consumers Association (CLECA), California Public Utilities Commission (CPUC), CalPeak Power and Malaga Power, Calpine, Cogeneration Association of California and the Energy Producers and Users Coalition (CAC-EPUC), Department of Market Monitoring (DMM), Joint Parties, Northern California Power Agency (NCPA), NRG Energy (NRG), NV Energy, Pacific Gas & Electric (PG&E), Powerex, San Diego Gas & Electric (SDG&E), Shell Energy, Six Cities, Southern California Edison (SCE), Viasyn, Vitol, Wellhead, Western Power Trading Forum (WPTF), Xcel Energy

Stakeholder comments are posted at:
Commitment Cost Enhancements Phase 3: http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCostEnhancementsPhase3.aspx
Bidding Rules Enhancements:
http://www.caiso.com/informed/Pages/StakeholderProcesses/BiddingRulesEnhancements.aspx

Other stakeholder efforts include:

Commitment Cost Enhancements Phase 3:

- Technical Workshop, 7/20/15
- Conference Call, 8/31/15
- Conference Call, 11/9/15
- Conference Call, 2/25/16

Bidding Rules Enhancements:

- Conference call, 12/10/14
- Meeting, 04/29/15
- Conference call, 05/15/15
- Meeting, 12/03/15
- Conference Call, 01/14/16
- Conference Call, 02/22/16

Management proposal						
Comments of following Market Participants	**Use-limited resources that qualify for such status per the revised definition will be eligible for an opportunity cost include in daily commitment cost bids.**	**A temporary exception for contractual limitations to qualify for an opportunity cost.**	**Allow resources to reflect both a market based and physical based capability value for a subset of resource characteristics, subject to minimum values.**	**Make changes to the natural gas transportation rates and to the electricity prices used in calculating resources' costs for commitment cost bid caps.**	**Resources without a day-ahead schedule can re-bid commitment costs in real-time, and for non-resource adequacy resources, no longer automatically insert bids into the real time unit commitment process.**	**Provide market participants the opportunity to recover actual costs incurred above the commitment cost bid cap by filing at FERC.**
California Department of Water Resources (CDWR)	Requests the ISO retain the default use-limited for hydro and participating load due to potential implications on CDWR's resources.	No position	Does not support requiring the physical based capability value to be based on maximum physical capability because it does not allow engineering judgement to protect equipment.	No position	No position	No position
California Public Utilities Commission (CPUC)	Supports the concept of providing an opportunity cost but questions how resources would demonstrate the need for an opportunity cost.	Supports the exception but now requests it be extended for the life of the contract	Does not support the start per day minimum of two; It is above must offer obligations for some RA flexible capacity categories and may be unreasonable for demand response.	No position	No position	No position

California Large Energy Consumers Association (CLECA)	Concerned about the impact on resources currently use-limited by default, specifically demand response resources that will no longer be use-limited and the change in treatment under the resource adequacy availability incentive mechanism.	No position	No position	No position	No position	No position
Cogeneration Association of California and the Energy Producers and Users Coalition (CAC-EPUC)	Concerned the policy excludes combined heat and power (CHP) resources as they might not have an opportunity cost in capacity above regulatory must take.	No position	No position	No position	No position	No position
Joint Demand Response Parties	Appreciates the clarification but continues to be concerned, specifically about demand response resources that will no longer be use-limited and the change in treatment under the resource adequacy availability incentive mechanism..	No position	No position	No position	No position	No position
Department of Market Monitoring (DMM)	DMM supports the effort to develop opportunity cost adders but remains concerned about relying on negotiation process for potentially a large subset of resources.	DMM is concerned with the impact these exemptions will have on the overall market efficiency and flexibility.	Supportive of the approach and minimum of two starts per day for max daily starts and transitions.	Supports	Supports	Conditional support. Any process, even at FERC, requires strict and clear guidelines

Northern California Power Agency (NCPA)	Supports the concept of providing an opportunity cost.	No position	Supports maintaining a single set of capability values to reflect sound engineering and economic judgement.	Supports	Supports	No position
Pacific Gas & Electric (PG&E)	Supports the concept but does not support the revised use-limited definition as it may cause confusion for market participants.	Appreciates the provision; requests the exception be for the life of the contract.	Does not support the minimum of two starts per day as it may place additional burden above RA requirements.	Supports	Supports	Opposes as premature. FERC proceeding initiated on energy price formation, which while not addressing commitment costs, does broach the underlying cost verification for energy bids and could inform this proposal.
San Diego Gas & Electric (SDG&E)	Supports the opportunity cost methodology but concerned about the lack of detail in some elements. Requests storage be included as an example.	Does not agree with the proposed cut-off date in the provision nor providing the exception for only three years.	Does not agree with the minimum of two starts per day. No longer meets the original intent nor is it aligned with must offer obligations.	No position	Supports	No position
Six Cities	Supports the ISO providing an opportunity cost and modification to outage cards for demand response resources, but would prefer to see more frequency updates of the calculation.	No position	Supports with additional clarification regarding the physical values still being able to reflect environmental restrictions.	Supports	Supports	Supports. Proposes modification to allow operational flow order costs, stranded gas costs, and balancing penalties to be recoverable as well.

Southern California Edison (SCE)	ISO should consider the possibility of commitment costs for Proxy Demand resources.	Appreciates the provision; requests the exception be for the life of the contract.	Does not support the minimum of two starts per day; should be aligned with RA categories	Supports	Supports	Support for cost incurred on days where the ISO implements its manual process to update gas prices used by the day-ahead market in the event of a large day-over-day increase.
CalPeak Affiliates	No position	No position	No position	No position	Supports	Believes ISO should eliminate commitment cost bid cap instead.
Calpine	No position	No position	No position	Supports	Supports - Proposes enhancements to proposal that would allow for higher bid cap percentage in RTM to allow for rebidding limited to higher bid cap, for example 150% of proxy.	Supports
NRG Energy, INC (NRG)	Suggests other reasons to allow negotiations for opportunity costs and notes resources should not be penalized under the RA availability incentive mechanism if bids reflected opportunity cost.	Appreciates the provision but urges the exception not be limited to three years.	Supports and asks for additional clarity for when one start per day is acceptable.	Supports	Supports	Supports. Proposes modification for generator that cannot procure gas to follow CAISO dispatch instructions at any price and consequently cannot avoid operational flow order charges to allow these costs to be

						recovered through the filing process.
NV Energy	Supports the concept of providing opportunity cost adders but believes the use-limited definition is too restrictive.	No position	Generally supports the idea but does not support the minimum of two starts per day on EIM resources.	No position	No position	Opposes. CAISO has not adequately provided basis for deferring to FERC, it's not a just and reasonable mechanism, and would require investment of resources and no incidental benefits.
Western Power Trading Forum (WPTF)	No position	No position	No position	No position	No position	Supports. Notes support for other costs such as stranded gas, balancing penalties, and operational flow order penalties to be covered under filing right.

Management Response	Management sees this proposal as a significant improvement over the current process for managing use-limitations of use-limited resources. The proposal provides significant efficiency and reliability gains. The definition for use-limited resources identifies, and provides, resources an opportunity cost for limitations that cannot be optimized in the daily market horizon, resulting in more optimal commitment and management of these resources. Any resource can apply for use-limited status, and thus be eligible for an opportunity cost, based on the revised definition. The proposal also ensures that resources that are currently use limited by default, such as demand response, are not impacted by the change in status to non use limited. Exempting resources from the RA availability incentive mechanism after they exhaust their starts would eliminate the incentive to replace these resources, which are needed for reliability. Management understands demand response programs are currently in a significant transition period and have	Flexibility requirements will continue to increase as more renewable resources are added to the system. While contractual limitations on number of starts and other unit characteristics may have been reasonable under historical system conditions, they will become increasingly binding as flexibility needs increase. The temporary exception provides market participants time to determine the most cost effective method to acquire more flexibility, which may be renegotiating the contracts rather than	Management wants to take this opportunity to clarify that under the current tariff, the resource capability fields are required to represent physical abilities of the resource. The intent of this proposal is to provide additional flexibility to allow operating parameters used by the market to reflect preferred values, which can provide another means to manage resource constraints that do not qualify for use-limited status or are not explicitly modeled in the market. The minimum of two starts per day does not expand the must-offer obligation of RA flexible capacity resources. The flexible capacity categories and their associated required minimum number of starts per day define minimum requirements to qualify for the categories in RA showings and not the must-offer requirement. The two start per day minimum is to address market power concerns that RA requirements are not intended to address. Requiring two starts per day for EIM resources does not create a must-offer	Management acknowledges and appreciates the support for these proposed cost estimate enhancements.	Management acknowledges and appreciates the support for this proposed enhancement to its commitment cost bidding rules. While Management appreciates the alternative suggestion to apply different market power mitigation bid caps to commitment cost offers it finds any changes to its market power method is premature. A proposed change to its method requires a longer stakeholder process.	The ISO believes its proposal to allow for resources to request that FERC approve reimbursement for gas costs above the commitment cost bid cap is a reasonable alternative to eliminating its commitment cost bid cap. Eliminating the commitment bid cap will take further vetting to determine if it's a viable alternative for the ISO market and any potential implementation would be some time in the future. A resource can incur commitment costs above the cap even on days the ISO has not implemented its procedure for large day-over-day gas price increases as gas prices may increase after the time of the day-ahead market. Management believes FERC more appropriately suited to determine if it is just and reasonable to reimburse costs above the cap because it can

	not considered the change in the resource adequacy availability incentive mechanism for the 2017 deliverability period. Therefore, Management commits to coordinating with demand response providers to time the implementation of the proposed change in the availability incentive mechanism for demand response to take into account having sufficient time for reflection of future RAAIM/replacement obligations. While management appreciates additional detail may need to be worked out in the future for certain demand response and storage resources, there are not any such resources currently in the ISO market that would require an opportunity cost. Management is addressing the needs of storage resources in the Energy Storage and Distributed Energy Resource initiative. Proxy demand response resources could register for use-limited status if a case can be made that such status is warranted.	obtaining new resources. Prior to the end of the proposed provision period, Management will evaluate the market and reliability impacts if contracts under the provision were provided the exception beyond the current three-year period, and consider changes at that time. The proposed cut-off date captures contracts that underwent regulatory review and were effective prior to opportunity cost discussions.	requirement – these resources have no such requirement. It only ensures the market has access to starts so it can start-up and shutdown these resources appropriately. For example, if only one start per day is listed, the market may be forced to leave a resource on throughout the day to ensure it is available for the evening load ramp.			make subjective determinations about specific circumstances and can more readily obtain information to determine the actual costs incurred. In light of the reduced storage in Southern California and the potential new balancing penalties and in response to the comments summarized above, Management revised its draft final proposal so that the ISO tariff would not preclude a market participant from demonstrating to FERC that other types of costs such as imbalance penalties, operational flow order penalties, and stranded gas costs.were reasonably incurred and should be reimbursed. Management does not believe its proposal is inconsistent with the FERC proceeding initiated on energy price formation as that proceeding address energy above minimum load, not commitment costs.