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Topic	Market Participant	Comment	ISO's Response
Three-year contractual limitation provision for subset of long-term contracts	CPUC, NRG, PG&E, SCE, and SDG&E	Appreciates the proposed three-year provision but urges the ISO to respect those limits for the duration of the contracts without imposing a three year limit. CPUC also asks for clarification regarding the proposed cut-off date of January 1, 2015 used to determine which contracts would be eligible under the provision. SDG&E proposes the cut-off date be either tied to the FERC order or possibly be the date by which the contract was approved by the CPUC.	The ISO is not comfortable with extending the exemption for the life of the contracts due to uncertainty regarding the total quantity of capacity that would be eligible under the provision, the length of the contracts, and increasing flexibility needs of the market. The ISO will commit to evaluating reliability and system impacts prior to the end of the three year period, and be able to more accurately determine the market and reliability impact an extension would have at that time. The January 1, 2015 cut-off date is the date by which the contract was approved by the CPUC.

Demand response	CLECA, Joint Parties, and CPUC	Continue to be concerned with demand response resources losing default use-limited status. All stakeholders also asked for clarification regarding the RAAIM treatment of DR resources when an annual limitation has been reached.	The intent of removing default use-limited designation is to ensure all resources that are currently default use-limited qualify under the revised definition based on eligibility for an opportunity costs. In general, the ISO recognizes that all resources currently considered use limited would continue to be exempt from the bid insertion rules. With respect to DR, the intent was to ensure that the definitional change imposes no impact on demand response resources due to the potential change in use-limited status. Accordingly, the ISO proposed new nature of work outage cards. These cards will be structured similarly to the use-limited reached outage cards. Therefore when an annual limitation of a DR resource is reached, the resource will be non-exempt from RAAIM starting the first day of the subsequent month; this is the same treatment being applied to use-limited RA resources. The ISO needs to ensure that 1MW of RA from a given resource type is the same quality of 1MW from another resource type. Therefore, RA DR resources need to be held to the same standard as non DR RA resources. After further discussion with the stakeholders, the ISO understands that the concern with the change in RAAIM treatment is primarily due to the timing of this proposed change and the current DRAM and Utility DR programs. Programs effective for 2017 have not contemplated this additional risk/cost. The ISO has committed to working with the DR community to time implementation of this change to DR resources to allow sufficient time for the risks/costs to be considered.

	SCE	ISO should consider the possibility of commitment costs for Proxy Demand resources. Ruling commitment costs and opportunity costs out up front may limit future integration.	CCE3 has not addressed commitment costs of DR resources. In the Proxy Demand Resource initiative, the ISO developed functionality to implement commitment costs but general principles have not been established. To date, no demand response resource has proposed any commitment costs that would meet the tariff definition of start-up or minimum load costs that could not be reflected in an energy bid. The ISO has not ruled out opportunity costs for DR. If there is a limitation that extends beyond the market optimization horizon warranting an opportunity cost, the DR resource can apply for use limited-status and would then be eligible for an opportunity cost.
Masterfile Resource characteristics	NCPA	Asks for defined criteria for when the market would use the Market based values versus the Design capability values. Also indicated support for maintaining one set of masterfile values that can be used to reflect economic judgement.	The market based values will be used in the market on a day to day basis. Only for exceptional dispatch under stressed system conditions will the design values be used. The ISO appreciates the suggestion of one set of Masterfile values that can be used to reflect economic and engineering judgement. Having two sets of values will enable the economic judgement to be reflected in one value, used by the market, while still providing the design capability value information to be utilized by operations under stressed system conditions.
	NRG	Requests the ISO to clarify a resource may list one start per day if the operating characteristics would limit it to one start per day.	If a resource's design capability value is one start per day (or the resource qualifies for an exemption due to its age), the resource can also have one start per day in the market based max daily start field.

	CPUC, PG&E, SCE, SDG&E, and NVE	Do not support the minimum of two starts per day as that imposes additional must offer obligations on RA resources that have only one start per day requirement. CPUC and SCE also state that this change in the minimum value goes against the original intent of the proposed field.	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. Moreover, resources that do not have an RA obligation are not required to bid at all. Similarly, requiring two starts per day to be reflected in MF for EIM resources does not create a must-offer requirement. It only ensures the market has access to a minimum number of starts so it can start-up and shutdown these resources appropriately and not force the market to keep a resource on once it is started or to Exceptional Dispatch to turn a resource off to preserve the start for later in the day. 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. The original intent of this proposal was to provide additional flexibility in the masterfile fields, which could then be used to *manage*

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			other resource limitations such as contractual limitations, not only reflect contractual limitations. It provides an additional management tool above and beyond the flexibility provided today for maximum daily starts in the masterfile fields.

	CDWR	Does not support imposing a requirement to only include design capability values in masterfile as CDWR currently using the masterfile fields to reflect engineering judgements.	The proposal also provides another masterfile field that can reflect the engineering and economic judgements, which will be used in the market on a day-to-day basis. The design value will only be used for exceptional dispatch under stressed system conditions.
	NVE	Asks if the master file data values will also include other parameters such as minimum on and off times for units.	The current masterfile values include a large quantity of various resource characteristics, including minimum up and down times, and will continue to be used in the market unless there is also a market based value for the same resource characteristic; in that case, the market based value will be used in the market for that resource characteristic.
Opportunity cost model	NRG	Questions the assumption that using historical implied heat rates and a power price conversion factor will capture anticipated changes. The build out of renewables will have an effect on LMPs that cannot be captured by GHG and gas costs and will serve to lower prices.	The power price conversion factor based on future power prices was included to capture the anticipated market conditions of the energy market that are not related to the nature gas market. If the build out of renewables is anticipated to lower prices, the conversion factor should reflect that change and then lower the estimated LMPs accordingly.
	SCE	ISO should use proxy LMPs for new resources rather than wait until sufficient prices have been generated.	The ISO appreciates the suggestion but would still be faced with the determination on how to estimate proxy LMPs for a new resource, potentially in a new region, that does not have historical wholesale energy prices. Using a future energy price close to the new resource would not reflect the volatility of energy prices at that location which is a significant characteristic of the opportunity cost model.

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	SCE, PG&E, and Six Cities	The stakeholders strongly recommend additional testing of the proposed model prior to implementation to identify and resolve any issues.	The ISO will strive to provide results of the model once the software is developed and before the rule changes are incorporated into the market.
	Six Cities	The ISO should ensure it uses consistent applications of the term "start-up"	The ISO appreciates this observation and will ensure the opportunity cost model identifies a start in accordance with the current tariff and settlements definition.
	SDGE	The ten percent margin use in the model should be a discrete fixed value used throughout the year as opposed to a declining value as the year progresses. Also suggests the name be changes to "uncertainty margin" as "reserve margin" is used by operations.	If the opportunity cost model reserved a discrete value of the limitation for the last month of the year, it could become the situation that a resource has an infinite opportunity cost adder if less than the discrete value of the limitation remains. Tailoring the margin along with the remaining limitation still provides an uncertainty margin while producing more appropriate opportunity cost adders. The ISO appreciates the suggested name change and will take that into consideration when drafting the tariff and BPM language.
Major Maintenance Adder	SCE	ISO and DMM should clarify the Major Maintenance Adder negotiation process and provide perspective on what criteria will be used to determine appropriate MMA values.	Discussion of the MMA process is not in scope for this initiative. The ISO would point the stakeholder to seek further discussion with the market monitors regarding what, and how, the process considers reasonable costs.
Initiating a renegotiated opportunity cost	Six Cities	Requests the right to initiate a renegotiation in 39.7.1.3 of tariff be extended to the resource owner and scheduling coordinator as well.	In general, the ISO agrees that SCs have the right to initiative a new process for negotiating any of the negotiated cost components under the existing tariff provisions and would extend that to the negotiated opportunity cost. What has not been clear is that the ISO have a

			commensurate right to initiate a renegotiation.
RAAIM treatment for variable run-of-river hydro	PG&E	Requests the ISO exempt variable run-of-river hydro resources from RAAIM similar to treatment of wind and solar. PGAE proposes a process where the SC provides supporting and legal documentation to verify the resource does operate in a similar manner as wind and solar.	RAAIM exemption for specific resource types was contemplated under the Reliability Service initiatives. This is a topic that would best be addressed under the current RSI stakeholder process rather than CCE3.
Remove default use-limited status	CPUC	It is unclear how resources that are no longer deemed use-limited would demonstrate the need for an opportunity cost.	Any resource, including those that will no longer default to use-limited status, can go through the use-limitation registration and application process. In that process, supporting documentation is provided and reviewed by the ISO to determine if the resource warrants use-limited status based on limitations that can be reflected in an opportunity costs. While is it natural to consider resources that cannot be available 24/7 as use-limited as a matter of normal usage of the English language, the ISO is narrowing what that term means as a matter definition under the ISO tariff.
	PG&E	Opposes removing the default designation as it places additional administrative burden on SCs.	The ISO understands wanting to avoid any additional administrative work. Given that most resources under RSI1, regardless if they are default use-limited, will have to provide supporting documentation. CCE3 policy is structured to leverage the processes put into place under RSI1 to minimize any additional administrative burden. For example, the supporting documentation required for use-limited registration/application process with RSI1 can be leveraged to meet the requirements, in most cases, for CCE3. Once the initial assessment is made, the SC has the obligation to verify through an affidavit that there have been no change or, if there have been changes, the SC simply has to submit the changes and supporting

			documentation. The SC does not need to resubmit any materials that remain in effect.
	CDWR	Requests the ISO retain default use-limited status for hydro and participating load resources. Also asks how CDWR's Participating Load Agreement will be impacted if no longer use-limited.	Hydro resources with limited storage capabilities will likely continue to qualify for use-limited status. Participating load resources could also go through the registration/application process to obtain use-limited status if there are verifiable commitment costs and an acceptable limitation that extends beyond the market optimization horizon. CCE3 is not proposing to change the bid insertion exemption for hydro or participating load resources even without use-limited status. Thus the ISO is not intending to propose any changes in CCE3 that would affect PLA. The ISO understands that existing pro forma agreements may contain terms that get redefined, such as the term use-limited and would want to plan to revise the PLA between ISO and CDWR.
	CDWR	Requests the ISO to clarify how hydro resources will be impacted if no longer use-limited. For example, how will units bid if the ISO no longer has use-plans	CCE3 does not propose any changes to how resources will be required to bid or changes to bid generation rules. If a hydro resource is no longer use-limited, it will still be exempt from bid generation and will still be held to the must offer obligations determined under RSI.
Storage resources	CPUC	Difficult for CPUC staff to agree ESDER 2 will adequately develop an optimization model for storage resources to reflect start-up and opportunity costs as that initiative has yet to begin.	ESDER Phase 2 posted an issue paper on March 22, 2016.

Timing of initiative	CPUC, PG&E, SCE, SDG&E, and CDWR	ISO should delay the Board decision to allow more time to discuss recent elements and address outstanding questions surrounding the details of the design.	The initiative is a step in the right direction of being able to more efficiently and optimally dispatch use-limited resources within the market. In order to assess and make decision on the majority of remaining questions regarding the details of the methodology, the ISO and market participants need to first gain experience. The policy contains several modest approaches to enable a learning curve without undue penalties on resources or the market.
Use-limited definition	PGAE	Opposes the re-definition of use-limited and continues to propose the alternative of defining use-limited resources, based on the current definition, which are eligible for an opportunity cost, based on the criteria set forth in the CCE3 proposal for use-limited.	The ISO acknowledges that there is more than one way the ISO could reflect these policy changes in the tariff and could have taken the approach of creating a new category of resources, which could have been a sub-category of use-limited resources. The ISO made the decision some time ago to narrow the scope of the definition and this decision is already reflected in tariff change approved in the RSI initiative and is now conceptually embedded in the tariff.
	SDGE	ISO should add storage to the list of non-exhaustive examples to provide clarity as to how the ISO will view and handle storage resources with limitations over a year.	As stated in the proposal, the ISO does not agree that that storage resources should be included on the list. Including storage in the list of non-exhaustive examples could imply all storage resources would generally qualify for such status. Of course, SCs will be able to apply for use-limited status for storage resources and if the ISO determines that use-limited status is justified, then the storage resource

			would be eligible for an opportunity cost.
	CAC-EPUC	Concerned that the definition requires resources to have the ability to reflect an opportunity cost in commitment costs. CHP resources may not have an opportunity cost in capacity above regulatory must take, and therefore do not have the ability to reflect an opportunity cost. Suggests the definition be modified such that it does not require resources to have the ability to determine an opportunity cost or be susceptible to optimization.	The ISO agrees with the statements but does not necessarily see any need for policy changes. First, neither existing, nor future policy or tariff, would require a CHP resource to be a use-limited resource or have an opportunity cost. Existing ISO tariff exempts regulatory must take capacity from bid generation rules even if the capacity is RA capacity. Non regulatory must take capacity may or may not be eligible for an opportunity cost. The SC would be able to, but not required to, seek use-limited status for non-regulatory must-take capacity. The ISO intends to draft this tariff language with these thoughts in mind. If ISO welcomes further dialog with CAC-EPUC to work out these concerns.
	NVE	Finds the proposed definition too narrow as it excludes any negotiated limitation and disallows operating limits in maintenance agreements. Does not agree that the behavior to exercise market power, even on a theoretical basis, is likely to occur. Lastly, the restrictive approach will result in scheduling coordinators deciding when to make the unit available with bids and when not to, which goes against the intent of this initiative.	The proposed definition is for purpose of establishing the eligibility for an opportunity costs. Other tariff language will address when a negotiated opportunity cost is appropriate. The ISO has had a long-standing position that contractually negotiated economic provisions that are not related to exogenously imposed limits are not eligible for an opportunity cost adder. The ISO provides for maintenance costs to be included in the major maintenance adders. EIM resources. do not have must-offer-obligations similar to RA resources, and therefore not assessed under RAAIM. The proposed definition therefore should not have any impact on when non use-limited EIM resources are bid into the markets.
	SCE	ISO should clarify the treatment of resources with soft-caps, specifically in the event they cannot purchase additional compliance instruments.	In the event a resource with a soft cap cannot obtain additional compliance instruments, the resource could apply for use-limited status and make a case to the ISO that the soft cap has become a hard cap, for example,

			when additional compliance instruments are unavailable.
Use-limited outage cards	NRG	ISO should adopt a policy where if the bids have reflected the opportunity cost, under no circumstance, will it be subject to replacement costs or RAAIM penalties.	If the ISO adopted this policy it will not address the issue where a resource that is no longer available continues to be shown on monthly RA showings. A resource may reach its limitation, even if the opportunity cost was 100% accurate and reflected in the bids, if the optimal time to use the resource was before the end of the limitation period, e.g., the year. The resource is no longer available and therefore should not continue to be shown on RA showings. The proposed change in RAAIM penalties is to incentivize replacement capacity to be shown.
	SDGE	Supports maintaining the outage card for a transition period but suggests additional rules or guidance be provided as what would be considered acceptable use of the outage card. Without guidance it is unclear how the ISO will guard against market manipulation.	The short term outage card was initially established through RSI1. CCE3 policy states it will continue to retain the card as originally developed for a transition period but does indicate reasonable use to be in the event a resource is getting close to its limitation, even with the bids reflecting the opportunity cost. The ISO will gain experience as to both whether and when the card may no longer be needed or if the card is being used in circumstances that do not appear justified. In the latter case, it would consider the potential need for rule change and also the ability to refer the market participant to FERC if circumstances warrant.
	CPUC	Asks for clarification if all resources that can currently use the outage cards can continue to do so after the revised definition of use-limited.	Resources that are no longer use-limited will not have access to the use-limited reached outage cards. Demand response resources that are no longer use-limited will have access to similar nature of work outage cards as the use-limited reached cards.
	CDWR	Agrees with retaining the short term outage card and urges the ISO to consider allowing CDWRs	After gained experience, the ISO will determine when the short term use-limited reached can removed. At that time, the ISO can evaluate if there is a

		resources to continue to use the outage card.	need to retain use of outage cards as a management tool if a subset of resources have proven to be difficult to manage through an opportunity cost.
Use-limited application/registration process	NRG	Asks why is it necessary to eliminate the five day response time from the tariff if feedback is intended to be prompt.	The five day response time of either accepting or denying use-limited status was prior to any review of supporting documentation. The new process of reviewing and validating the limitations and documentation will require additional time.
	Six Cities	Provide specific times for submission of data on use-limited resources and response by the ISO.	The response time by the ISO now needs to allow for review and verification of supporting documentation. Therefore it is difficult at this time for the ISO to definitively provide a timeline for a new process.
Opportunity cost negotiation process	NRG	Urges the ISO to consider a wide range of conditions under which a market participant can seek to dispute and negotiate the opportunity cost of a modeled resource.	Ideally all resources would fit into the model and receive a calculated opportunity cost. The dispute and resolution process is provided to recognize that despite the ISO's best efforts, the opportunity cost model may not accurately determine an opportunity cost for all resources. After experience with the opportunity cost model, there may be other situations that arise and would warrant having a negotiated process. That determination and evaluation can be at that time.
	PG&E	ISO should outline criteria used to evaluate the reasonableness of a submitted opportunity cost methodology. PG&E also suggests that resources should be able to update the negotiated opportunity cost anytime the SC can demonstrate values have changed.	The ISO understands the importance of providing guidelines around what would be considered reasonable. The ISO plans to provide additional guidance as to what a reasonable opportunity cost methodology take into consideration through the BPM process. Through the negotiation process, the ISO and market participant will determine the frequency of updates best suited for the resource and given

			limitations that can be accommodated by the ISO.
	CDWR	Suggests all resources remain use-limited and on registered cost option while opportunity cost negotiations are developed and agreed upon.	The ISO considered this option and concluded that having all resources move over to the proxy cost option provides the benefit of being able to reflect daily costs through daily bids, whereas the registered cost option is a fixed cost for 30 days. As part of the negotiation process, the interim value provided while negotiations continue could take into consideration past registered cost values for that resource.