Stakeholder Comments Template

Flexible Resource Adequacy Criteria and Must-Offer Obligation Straw Proposal, July 25, 2013

Submitted by	Company	Date Submitted
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This template is for submission of stakeholder comments on the topics listed below, covered in the Flexible Resource Adequacy Criteria and Must-Offer Obligation revised straw proposal on July 25, 2013, and issues discussed during the stakeholder meeting on August 1, 2013.

Please submit your comments below where indicated. Your comments on any aspect of this initiative are welcome. If you provide a preferred approach for a particular topic, your comments will be most useful if you provide the reasons and business case.

Please submit comments (in MS Word) to fcp@caiso.com no later than the close of business on August 15, 2013.

1. The ISO has proposed a process by which an annual flexible capacity requirement assessment would be conducted. Please provide any comments or questions your organization has regarding this proposed process.
   SDG&E Response: SDG&E agrees that the process of flexible determination must be transparent. SDG&E recommends the CAISO request contract data through the LRA since the CAISO proposes to allocate the requirements to each LRA. While this may seem like an extra step of getting the data, much of the requested data is already provided to the CPUC on a regular basis.

   SDG&E does not agree that the CAISO should be requesting intermittent resources data for the next five years. The current requirement is one year out and even the new multi-year joint reliability framework is only for three years out. Please explain the reasoning for the 5 year term.

2. The ISO has outlined a methodology to allocate flexible capacity requirements to LRAs. It is based on one possible measurement of the proportion of the system flexible capacity requirement to each LRA and calculated as the cumulative contribution of the LRA's jurisdictional LSE's contribution to the ISO's largest 3-hour net load ramp each month. Please provide comments regarding the equity and efficiency of the ISO proposed allocation. Please provide specific alternative

allocation formulas when possible. The ISO will give greater consideration to specific allocation proposals than conceptual/theoretical ones. Also, please provide information regarding any data the ISO would need to collect to utilize a proposed allocation methodology. Specifically,

a. Over the course of a day or month, any of the identified contributors to the change in the net load curve may be positive or negative. How should the ISO account for the overall variability of a contributor over the month (i.e. how to account for the fact that some resources reduce the net load ramp at one time, but increase it at others)?

b. What measurement or allocation factor should the ISO use to determine an LRA's contribution to the change in load component of the flexible capacity requirement?

c. Does your organization have any additional comments or recommendations regarding the allocation of flexible capacity requirements?

SDG&E Response: SDG&E agrees that the CAISO should submit to the LRA, each of its LSEs' contributions so that the LRA can allocate the requirements to the LRAs. It should be the LRAs that determine how to allocate those requirements to each of the LSEs.

a. It is SDG&E's understanding that the net load ramp requirement is not for an aggregation of each day of the month; it is rather the day where the net load ramp is most in the month. The CAISO should only look at the resource's contribution on that day. If the contribution reduces the load ramp, then that resource's portion is limited to 0% not a negative percentage. The rest of the LSEs will need to provide flexible need based on their positive contribution to the net load ramp.

b. Each LRA's contribution is comprised of all of the corresponding LSEs' contracts that result in the net load ramp. As such, the CAISO should allocate to the LRA based on those respective LSEs' contributions to the net load ramp.

c. SDG&E would like the CAISO to clarify the term "Monthly Average Load Factor". How is this term different from the Peak Load Ratio Share in mathematical terms.

California ISO
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3. The ISO has proposed must-offer obligations for various types of resources. Please provide comments and recommendations regarding the ISO's proposed must-offer obligations for the following resources types:

   a. Resources not identified as use-limited
      SDG&E Response: SDG&E is interested in learning how self-schedules have occurred historically. Has combined cycle resources' self-schedules caused the CAISO to be in over gen situation when other must run resources are generating? Would reducing the self-schedules down to one unit for each combined cycle have helped such a situation prior to any dispatch down instructions were sent to other must run resources?

   b. Use-limited resources

      1. Please provide specific comments regarding the ISO's four step proposal that would allow resources with start limitations to include the opportunity costs in the resource's start-up cost.
         SDG&E Response: SDG&E is uncertain the ISO opportunity cost proposal will effectively manage the conventional resources with annual start-up limits or run hours. There will be continuous battles on what opportunity cost is appropriate (and for how long) to result in not running out of use before the end of the year and still allow maximum use of the resource. This will be a futile exercise pitting the generator against the ISO. The generator will fight for higher opportunity costs so the use limitation is not reached before the end of the year. The ISO (through Potomac Electric) will use a lower opportunity cost that retains a risk of running out of usage before the end of the year. In theory using opportunity costs could work in an average year, however an average year rarely exists. With the CAISO's ever changing portfolio of RPS and OTC resources, predicting the proper opportunity cost is impossible. Using opportunity costs to restrict usage is an indirect control that is actually not necessary if the CAISO is able to manage and track the limitations. SDG&E proposes that the opportunity cost be exempt from MPM as the purpose of inserting the cost is for the resource to stay within certain limits annually and not profit..

         The ISO is in the best position to track and determine on an ongoing basis how best to manage an annual limitation over time. The ISO has visibility to its entire resource portfolio and can optimize the utilization of use limited resources directly by monitoring and adjusting usage toward the limitation on an ongoing basis. It will be awkward for the ISO to change opportunity costs quickly and accurately enough to optimize the use of a use limited resource. Perhaps the ISO should create an internal use plan for each use limited resource that is optimized across the ISO's entire portfolio on an annual basis. The ISO could restrict the total amount of each kind of annual use limitation that is allowed to count towards requirements like must be done for certain other resources like DR.

How ever the CAISO ultimately manages the use limitations throughout the year, the LSE must not have any replacement obligation if the use limitation is reached before the end of the year When LSEs procure flexible capacity on an annual basis, the expectation is the resource shall meet its obligations for the entire year. Current RA contracts do not involve parties sharing annual limitations as RA capacity is an obligation for the generator to bid or schedule into the CAISO markets. LSEs remain a blind party to the dispatches of the CAISO to an RA resource. If CAISO notifies the LSE the resource is over its use limitation and requires the LSE to purchase additional RA capacity, LSEs will effectively double pay for the same RA capacity. Ratepayers must not bare the burden of the CAISO's inability of managing the annual use limitations.

SDG&E recommends CAISO consider reflecting the above section in its next proposal. SDG&E does not wish to see based on the Joint Reliability Framework, a standard capacity product where either the CAISO or generator must notify the LSE that the resource which cleared the auction has exceeded its use limitation and the LSE must now go out again to purchase even more expensive capacity.

2. Please provide information on any use-limitations that have not been addressed and how the ISO could account for them.

c. Hydro Resources

d. Specialized must-offer obligations (please also include any recommended changes for the duration or timing of the proposed must-offer obligation):

1. Demand response resources
SDG&E Response: SDG&E supports integrating Demand Response to provide flexible capacity. Some DR programs can only be called on in the DA time frame while others can be activated in RT. If the CAISO does not activate those programs in

DA, then the CAISO should consider those programs to have met the Flexible MOO much like the Long Start Resources proposal. Demand Response programs sometimes may not be available for weekends when the net load ramp is needed most. Thus some limitation should be used to count that program fully. CAISO or CPUC may be able to provide data of how DR programs have met the maximum load ramp and determine a suitable EFC for those programs.

2. Storage resources
   SDG&E Response: SDG&E recommends the CAISO provide greater detail on its proposal for Energy Storage resources. Storage differs from DR programs and the MOO should reflect as such. SDG&E is unsure why storage resources' only option would be to submit economic regulation bids as regulation energy management resource.

3. Variable energy resources
   SDG&E Response: At the very beginning of the straw proposal, "[i]ntegrating a 33 percent Renewable Portfolio Standard (RPS)…creates several operational challenges for maintaining grid reliability." While the proposal allows renewables to not generate is outside of the box, it is contradictory to achieving the 33 percent state mandated RPS. LSEs will be unable to accurately forecast its renewables portfolio and receive the RECs to meet the RPS requirement while the generator will claim it could have fully delivered the energy and thus should be paid for its full potential output. LSEs may be at risk of penalty for not meeting the annual target due to the dispatch down instruction. This would also cause increased generation from conventional resources that may be owned and operated by that LSE which would increase the need for GHG credits. This would seem to increase rate payer costs all around. SDG&E at this time cannot support this part of the proposal

4. The ISO has proposed to include a backstop procurement provision that would allow the ISO to procure flexible capacity resources to cure deficiencies in LSE SC flexible capacity showings. Please provide comments regarding the ISO's flexible capacity backstop procurement proposal.
   SDG&E Response: The CPUC, in its most recent decision, has ordered all generators to not have the ability to unbundle its flexible capacity from its system/local capacity in 2014 and 2015 and seemingly beyond. This means generators cannot actively withhold its flexible capacity when selling it as system/local capacity. As such, when the CAISO needs to backstop such capacity, the current Tariff already has provisions to backstop system capacity

which would include the Flexibility attribute in CPUC terms. It may be necessary for the CAISO to alter the current CPM language to require the backstopped resource from self-scheduling beyond the resource's PMIN. The challenge with backstopping only the flexible portion of a resource is that the PMIN is forgotten. Did the CAISO backstop the PMIN which may not be flexible due to the start-up time? Do LSEs pay for surplus backstopped PMIN capacity in order to meet a flexible significant event?

5. The ISO is not proposing to use bid validation rules to enforce must-offer obligations. Instead, the ISO is proposing a flexible capacity availability incentive mechanism. Please provide comments on the following aspects of the flexible capacity availability incentive mechanism:
   SDG&E Response: CAISO should reconsider bid-evaluation for FRACMOO especially with the proposal for new availability incentive mechanism. Currently SIBR will validate generic capacity bids against the RA Supply Plan and the Capacity Availability Incentive Mechanism awards or penalizes the resource based on performance. SDG&E believes this should be the same for flexible capacity.

   a. The proposed evaluation mechanism/formula

      1. The formula used to calculate compliance

      2. How to account for the potential interaction between the flexible capacity availability incentive mechanism and the existing availability incentive mechanism (Standard Capacity Product)

   SDG&E Response: SDG&E believes the differentiation of a flexible product and generic product is makes the term "Standard Capacity Product" no longer standard as the CAISO not all capacity will be judged equally. The proposed flexible capacity availability incentive mechanism will encompass hours of 5am to 10pm of everyday while the existing availability incentive mechanism 5 hours changes by season and on non-holiday weekdays. The existing capacity availability incentive mechanism target is inappropriate since the time frame for the assessment is very different. SDG&E believes CAISO can provide some details based on historical bids into its market for flexible resources. In the past three years, what percentage of flexible resources accurately provided flexibility capacity in the DA and RT markets. This study can be performed by determining the EFC for those flexible resources and determine which flexible resources were used as generic capacity in the monthly supply plans. Of those flexible resources that were committed in the supply plan, the CAISO can review historical bidding and SLIC data to determine what the average percentage of economic bids were. This may provide a better indication of the target for flexible capacity availability incentive mechanism rather than using the targets from the existing availability incentive mechanism. It is imperative that a resource should not be double penalized for both capacity availability mechanisms.

b. The use of a monthly target flexible capacity availability value

    1. Is the 2.5% dead band appropriate?
       SDG&E Response: No, SDG&E recommends CAISO look at the hypothetical historical 3 year monthly averages and use the 1 standard deviation from that target. If the distribution is not normalized, then use the median value.

    2. Is the prevailing flexible capacity backstop price the appropriate charge for those resource that fall below 2.5% of monthly target flexible capacity availability value? If not, what is the appropriate charge? Why?
       SDG&E Response: The current CPM price seems appropriate.

c. Please also include comments regarding issues the ISO must consider as part of the evaluation mechanism that are not discussed in this proposal.
   SDG&E Response:
   1. The current availability incentive mechanism allows for resources to substitute another in order to avoid the capacity availability charges. CAISO's proposal for the new flexible capacity availability mechanism does not consider unit substitution to avoid such a penalty.
   2. As with the existing availability incentive mechanism, contracts executed prior to a certain date in 2009 and 2010 were allowed to be grandfathered from the financial impacts of the capacity incentive mechanism that were not originally contemplated when negotiating such contracts. The flexible capacity incentive mechanism should also allow grandfathering as this is a new financial risk that was not originally contemplated during negotiation.
   3. The current surplus of capacity availability mechanism penalties are distributed to the LSEs via load share ratio. Please provide clarification on how the surplus flexible availability mechanism penalties would be shared.

6. Are there any additional comments your organization wishes to make at this time?