Stakeholder Comments Template

Subject: Regional Resource Adequacy Initiative

Submitted by	Company	Date Submitted
Nuo Tang *858-654-1818* *Pamela Mills* *858-637-3746*	*SDG&E*	*May 4, 2016*

This template has been created for submission of stakeholder comments on the Revised Straw Proposal for the Regional Resource Adequacy ("RA") initiative that was posted on April 13, 2016. Upon completion of this template please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on May 4, 2016**.**

San Diego Gas &Electric ("SDG&E") appreciates the opportunity to comment on the California Independent System Operator's ("ISO") revised straw proposal.

SDG&E is concerned that there may be inconsistencies with coincidence or simultaneous and non-coincidence or non-simultaneous studies in the ISO's revised proposal. SDG&E requests the ISO to provide more information on the portions of the proposal that may be inconsistent with the proposed RA framework.

Please provide feedback on the Regional RA Revised Straw Proposal topics:

1. **Load Forecasting**

   The ISO proposes two coincidence factor methods. The coincidence factor is used to determine the allocation of system peak to each Load Serving Entity ("LSE"). Given the ISO's proposal for Zonal RA requirements, SDG&E questions whether the coincidence factor should be calculated based on each zone rather than the system as a whole. The ISO acknowledges that different zones peak at different hours. Yet the proposed methods do not consider the various peaking needs for each of the zones proposed by the ISO. SDG&E also requests the ISO to detail whether it will use the same method for the coincidence factors of Local RA requirements?

   The ISO proposes that existing LSEs in the current ISO Balancing Authority Area ("BAA") continue to submit load forecasts to the California Energy Commission ("CEC"). Then the ISO expects the CEC to submit the respective LSE data to the ISO. SDG&E wishes to understand which load forecast the ISO will use, the one which the CEC has already adjusted based on the CEC's coincidence factor

methodology based only on the existing ISO BAA territory or the unadjusted forecast? If it is the former, how will the ISO incorporate the adjusted forecast into the ISO's coincidence factor methodology and process? Would the adjusted forecast skew the results? If it is the latter, how does this affect the CEC's role in calculating the coincidence factor for existing LSEs within the current ISO BAA? Does the ISO propose to receive the combined hourly load forecast of all LSEs from the CEC or individual LSE load forecasts from the CEC?

The ISO proposes that if a LSE's non-coincident peak forecast diverges greater than 4% from average year-over-year weather normalized peak trends, then the ISO shall have the authority to adjust the LSE forecast. If the ISO is planning and setting requirements based on coincident peak, does it make sense to benchmark a LSE's requirements based on non-coincident peak? If the CEC has adjusted the LSE's forecast based on its methodology but the forecast is still above the ISO's proposed 4% threshold, will the ISO have authority to adjust that LSE's forecast on top of the CEC's adjustment? Will the ISO adjust the LSE's forecast to exactly 4% or would it be a different value?

SDG&E does not believe ISO should compare forecasts to historic normalized data. Historical normalized data often times do not capture new load patterns adequately or timely. The CEC's bi-annual Integrated Energy Policy Report ("IEPR") process incorporates new load patterns. SDG&E recommends that the ISO investigate if other state agencies, within the ISO's proposed expanded footprint, also have similar processes for forecasting load for their state. If the total coincident peak for all LSEs' load forecast is within the threshold of the forecasts developed within those processes, then there should be no adjustment.

2. Maximum Import Capability

The ISO proposes to slightly modify its methodology for calculating the Maximum Import capability ("MIC") values in an expanded BAA. Instead of using simultaneous studies, the ISO is proposing to use non-simultaneous studies because each zone may peak at different times.

SDG&E believes that the ISO's current historically-based study is overly conservative in that it does not anticipate significant changes in loads, resources and operations which could result in greater MIC. Instead, as SDG&E has long-recommended, the MIC should be based on forward-looking power flow/stability studies. These studies would establish the MIC given anticipated changes in future loads, resources and operations; changes which could result in import levels and patterns which differ considerably from historical levels and patterns.

3. Internal RA Transfer Capability Constraints

SDG&E believes the Zonal RA concept has some value in the expanded BAA. SDG&E requests the ISO to provide descriptive examples of the proposal and the

interactions with other portions of the RA program such as outage replacement, cost allocation of backstop authority and existing Path-26 constraints.

It is unclear to SDG&E whether System RA requirements are necessary if the ISO were to adopt Zonal RA requirements. The change to the zonal RA requirements from Path-26 constraints needs further development. Instead of limiting how much capacity LSEs may procure capacity in a location, ISO may be requiring LSEs to procure certain capacity in a specific location. While this concept seems to be similar to Local RA only on a larger scale, the new requirement may cause market power concerns. The ISO's zonal netting proposal may ultimately cause market participants to build resources within certain zones and not invest in transmission upgrades which would benefit multiple zones.

It is also unclear to SDG&E if flexible RA requirements would need to be adjusted based on zonal coincident ramps. Would zonal constraints apply toward flexible capacity procurement? If flexible RA requirements are based on the maximum three hour ramp of the entire BAA, it would seem that flexible capacity should not be constrained.

SDG&E requests the ISO to discuss how the zonal RA framework would fit on top of the RSI Phase 2 proposals for separating Local and System attributes. Adding another attribute on top of the current RA framework may create unintended consequences. Therefore, SDG&E would like the ISO to provide additional details in the next draft of its regional RA proposal and meeting.

4. Allocating RA Requirements to LRAs/LSEs

5. Updating ISO Tariff Language to be More Generic

6. Reliability Assessment

a. Planning Reserve Margin
SDG&E supports a probabilistic LOLE study approach to calculating the PRM.

b. Uniform Counting Methodologies
Long-term, SDG&E supports the Effective Load Carrying Capability ("ELCC") approach for all resource types that which are currently based on historical data. This includes not only Solar and Wind but also qualifying facilities ("QFs") and certain Hydro resources. However, SDG&E believes that the ELCC values must also be consistent with the monthly RA program. ELCC values for solar resources should be divided into photovoltaic or thermal and tracking or static. ELCC values for wind resources should be developed for small or large turbines. ELCC values should also be calculated to a Local area or sub-area rather than a statewide average.

In the short-term SDG&E believes the current exceedance approach needs to be used. A level playing field for contracting with generators will not exist among all LSEs until LRAs align their offer evaluation processes with their processes for establishing Resource Adequacy counting rights. Once these two processes are aligned through the use of consistent ELCC values, SDG&E supports the adoption of an ELCC approach.

c. Backstop Procurement Authority
SDG&E requests the ISO to provide details on the cost allocation for backstop procurement for zonal deficiencies, if the zonal concept is adopted. SDG&E would like to understand the cost allocation of the capacity procurement mechanism ("CPM") in relation to ISO's planning reserve margin ("PRM") proposal. Assuming multiple LRAs set their respective PRMs above or below the ISO's total system PRM. If the ISO's system wide PRM is not met because those LRAs, which set their PRMs lower than the ISO's PRM are unable to sufficiently lean on other LRAs who have set their PRMs greater than the ISO's PRM; will the ISO allocate CPM costs to all LRAs' LSEs regardless of the LRAs' PRMs, or only to the LSEs of the LRAs that set their PRMs below the ISO's system wide PRM? If the former, is the ISO acknowledging the LRA's decision to set a lower PRM and is not finding the LSEs of that LRA to be deficient because the LSEs have met the requirements of their respective LRA?

7. Other

Storage Counting Options

In Option 2, the ISO proposes that "… scheduling coordinators for resources submit the NGR's self-determined capacity factor, which should be based on sustainable output for four hours and the ISO will accept the value." SDG&E questions the appropriateness of allowing DSM programs to self-certify RA capacity. It is not clear to SDG&E how this option will work and what steps the ISO will take to ensure the accuracy of a self-determined capacity factor. SDG&E requests the ISO to provide additional information on this option.