Stakeholder Comments Template

Subject: Regional Resource Adequacy Initiative

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

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

- 1. Load Forecasting
- 2. Maximum Import Capability
- 3. Internal RA Transfer Capability Constraints
- 4. Allocating RA Requirements to LRAs/LSEs
- 5. Updating ISO Tariff Language to be More Generic
- 6. Reliability Assessment
 - a. Planning Reserve Margin
 - b. Uniform Counting Methodologies
 - c. Backstop Procurement Authority
- 7. Other

Comments of Western Resource Advocates, Western Grid Group, Natural Resources Defense Council, and Utah Clean Energy

Western Resource Advocates, Western Grid Group, Natural Resources Defense Council and Utah Clean Energy appreciate the opportunity to comment on the Regional Resource Adequacy Revised Straw Proposal ("Revised Proposal"). We are non-profit organizations that advance policies to further a low-carbon grid and reduce harmful emissions from fossil-fuel generation. We regularly participate in regional forums and regularly interact with PacifiCorp and other utilities who may become interested in participating if an RSO is formed with design elements and a governance structure that meet their needs. We regularly advocate positions before the California Public Utilities Commission, the Public Service Commission of Utah and the Washington Utilities and Transportation Commission, as well as the Nevada Public Utilities Commission, the Arizona Corporation Commission. Together we provide a perspective that we hope can be helpful to CAISO in transforming into a Regional ISO.

For the most part, the Revised Proposal is unchanged in concept from the Straw Proposal; it builds upon the Straw Proposal by providing further detail and seeking additional comment. However, the Revised Proposal differs in one fundamental particular. In the revision, instead of extending its Path 26 methodology to all other internal constraints, CAISO proposes using a zonal approach to address intra-RSO constraints.

We provide comment on the zonal approach and advocate the development of probabilistic methods and metrics as appropriate. Issue areas that we believe will require the development of probabilistic methodologies include the determination of maximum import capability (MIC), will likely include the determination of zonal import capability, and will include planning reserve margin (PRM) and methods for determining the capacity contribution for certain resource types.

To the extent that the Revised Proposal is unchanged from the Straw Proposal, we stand by our previous comments.¹

1. Load Forecasting

In our previous comments we supported the following components of the Straw Proposal: (1) participants in the RSO market will continue to develop their load forecasts as they currently do; (2) all hourly load forecasts will identify demand response, additional achievable energy efficiency, and distributed generation; (3) the RSO will review LSE forecasts and make adjustments if an LSE forecast diverges unreasonably from the LSE's actual peak loads or historical usage and the LSE cannot demonstrate their forecast is reasonable; and (4) the RSO will use these forecasts to develop coincident system load forecasts. We continue to favor this approach.

Transparency

We appreciate CAISO's response to our comments that load forecasting be robust and transparent and that the accuracy of forecasts be made public. We fully support CAISO's proposal to publish the results of load forecast accuracy after the fact, "specifically identifying

¹ Three of the organizations included in these comments previously submitted two sets of complementary comments on the Straw Proposal. WRA and NWEC submitted one set and WGG, NRDC and NWEC another.

the load forecast error percentages (%) for all of the submitted load forecasts comparing to their weather-normalized peaks." We believe providing this information mitigates bad behavior and builds trust that the ISO's processes will lead to efficient and fair outcomes.

Load Forecasting Requirements

A theme in these comments is the need to develop probabilistic methods and metrics; we believe a Regional ISO should employ state-of-the-art methods in assessing and protecting reliability. With this in mind, we support including the level of detail in load forecasting requirements needed for the Regional ISO to develop probabilistic metrics including a Loss of Load Expectation (LOLE) method for determining PRM.

Weather Normalized Peak and Load Forecast

We support the submittal of weather-normalized data using a 1 in 2 load forecast. We do not support the ISO dictating the method by which this forecast is developed. This would run counter to allowing participants to continue to develop their load forecasts as they currently do. Further, dictating the method appears unnecessary if the ISO undertakes a review of the non-coincident peak forecasts and provides a process for adjusting forecasts that appear unreasonable.

Load Forecasting Review and Adjustment Authority

We support the ISO being given the authority, through its tariff, to adjust LSE forecasts that appear unreasonable and for which the LSE is unable to demonstrate that a forecast out of line with its peak trend is reasonable. Allocations of capacity requirements are dependent on these forecasts, and unreasonably low forecasts can lead to leaning and potential resource insufficiency.

However, transparency is the key to trust. Authority for the ISOI to adjust LSE forecasts should only be exercised in an open and transparent manner through well-developed and well-understood processes.

Load Forecasting Review Criteria

We support the ISO using an identified criterion to trigger a review of an LSE's load forecast for reasonableness, and, given the information provided in the Revised Straw Proposal, use of a 4% divergence threshold in an LSE's forecast from an average year-over-year weather normalized peak trend appears to be a reasonable trigger criterion.

However, we also believe the processes that follow are of ultimate importance. Once a review has been triggered, an open and transparent review process is paramount. Details explicating the review process should be provided in the next revision.

Monthly Load Forecast Adjustments

We support allowing load-forecasting entities to update their forecasts in the month-ahead timeframe. One would expect month-ahead forecasts to be more accurate than forecasts developed year-ahead. Providing transparency into the accuracy of forecasts after the fact, as CAISO has proposed, will assist in revealing and mitigating leaning and gaming.

Coincidence Factor Methodology Options

We find both the Median of Five Monthly Peaks methodology and the Power Systems Coincidence Factor methodology to be rational approaches to correlating LSE coincident and non-coincident peak loads to the ISO's peak conditions. Since the ISO would apply the same coincidence factor formula equitably to all LSEs, we stand neutral on the choice of methodology.

2. Maximum Import Capability

In our previous comments, we raised three key issues: (1) we suggested that additional analysis is needed to determine whether the current methodology should be extended to a larger footprint and suggested the analysis be undertaken and the findings explained; (2) we asked how preexisting contractual rights would be treated, and we requested that the analysis address the treatment of preexisting contractual rights; and (3) we questioned whether an historical approach remains a viable method of determining MIC, particularly for an expanded footprint.

We appreciate the response to our concerns in the revision. In particular, we appreciate CAISO's response to our request for analysis and for clarifying that existing contractual rights will be protected.

With regard to the actual calculation of MIC for a Regional ISO, we remain unconvinced that the only change needed is a tweak to a note in the CAISO Reliability Requirements Business Practice Manual that would add a phrase to allow the use of non-simultaneous base case studies. Many commenters raised valid concerns that the current MIC calculation, which relies on two years of historical data may artificially limit import capacity, depending upon a variety of economic and weather-related factors. CAISO's response that the current method is sufficient because CAISO staff has flexibility in selecting data that has a sufficient level of MIC is not satisfying. This response does not address the underlying concern that relying on historical behavior does not adequately determine actual import capability, particularly as import patterns may change with an RSO, and it underscores the potentially arbitrary nature of deterministic approaches.

We therefore urge CAISO as part of this initiative to develop a robust stochastic approach to the determination of MIC, in a parallel fashion to consideration of methods for developing probabilistically determined metrics for a reliability assessment more generally. There are very good reasons to start moving toward these methods: use of the grid is changing with the addition of clean energy resources, these changes are accelerating, and expansion of a regional system operation will change them even more. That is the desired result: change in the use of the grid that is more efficient, less environmentally damaging, and more reliable. Historically determined values and approaches will be less and less useful as grid changes accelerate. If CAISO considers the timeline to develop a robust stochastic approach infeasible for this initiative, then we recommend it propose a placeholder approach and combine the tweak of the Reliability Requirements BPM with a clear plan to develop a probabilistic assessment of MIC.

3. Internal RA Transfer Capability Constraints

In the Straw Proposal, CAISO proposed extending the Path 26 methodology for allocating shares on constrained lines for RA purposes to all other internal constraints.

As CAISO considered how it would implement its proposal to extend the Path 26 methodology to other internal constraints, it recognized a number of problems and challenges including the following:

- Reducing allocations on Path 26 to current ISO participants, potentially impacting their ability to use Path 26 to provide RA;
- Allocating shares on all newly defined internal constraints to all RSO participants and potentially limiting new entrants' ability to use constrained lines to provide RA;
- Necessitating excessively complex accounting of allocations and netting over multiple internal path constraints that would only grow in complexity with the size of the footprint.

The zonal approach in the Revised Proposal is CAISO's response to these challenges. Instead of allocating transfer capability on internally congested lines, CAISO proposes to establish zonal RA requirements. The RA import limit for each zone will include the total MIC for all interties into the specified zone and the total of any internal transfer limits.

In our previous comments, we: (1) supported ensuring that any constraints that could potentially limit the transfer of RA resource between major internal areas of the ISO be identified and accurately recognized in RA determinations; (2) requested that CAISO identify paths where constraints will arise in a footprint that initially incudes CAISO and PacifiCorp; (3) observed that since all RSO participants would be allocated room on all contested lines on a pro rata load ratio share, any individual RSO participant may or may not have sufficient capacity on any one line to access their RA resources; and (4) requested that the Revised Proposal explicate the allocation and its impacts more fully using examples.

It appears, at least initially, that the zonal approach addresses the issues we previously raised. However, consideration of the approach raises additional questions regarding internal limitations, their determination, and their impact on zonal RA requirements. For the next revision please provide examples of how the "total of any internal transfer limits" is determined. Please explain how the approach would blend with determination of MIC using probabilistic methods.

We will further evaluate this approach in the next revision.

4. Allocating RA Requirements to LRAs and LSEs

We have no additional comments. We continue to support the proposal to allow allocation of local and flexible capacity requirements either directly to load serving entities or to their local regulatory authority for reallocation to the load serving entities in their jurisdiction.

5. Updating ISO Tariff Language to be More Generic

We have no additional comments. We continue to support the proposal to update tariff provisions to make language more generic.

6. Reliability Assessment

In our initial comments, we supported the proposal to conduct a reliability assessment using common metrics. We also supported the ISO retaining backstop procurement authority in the event that insufficient capacity has been secured.

We continue to support these elements of an overall proposal to transform the CAISO into a Regional ISO. However, we also recognize that linking a reliability assessment to backstop procurement authority does shift some authority, in effect if not in intention, from local

regulatory authorities and state commissions to the ISO, particularly over the longer-run. Therefore, we believe the technical rigor and transparency of the ISO processes will be important considerations to public utility commissions in their regulatory proceedings to come, and the methods selected through these processes must be broadly viewed as providing sufficient reliability and fairness in treatment across the ISO.

The use of probabilistic methods best achieves these criteria. While deterministic approaches are faster to develop and implement, these methods tend to have arbitrary components, and local regulatory authorities and state commission may be less willing to allow their authority to be diminished if the method selected has arbitrary elements that are not technically supportable, particularly on issues on which they have already ruled.

We therefore believe it is vital that probabilistic metric development move forward as quickly as possible while remaining accessible to the many stakeholders across the region that could be affected. However, achieving technical rigor and garnering broad support in the timeframe allotted to the current initiative could become a challenge. If it does, we believe the solution is to use a placeholder approach for the determination of certain metrics in parallel with the development of probabilistic metrics.

Specifically, if, rigorous methods with sufficient detail cannot be developed in time for the FERC tariff filing, we encourage CAISO to propose a reliability assessment that initially uses the PRM and capacity counting conventions that are currently used in LSE planning processes with a clear plan to transition to probabilistic metrics as quickly as possible. This approach is consistent with our recommendation regarding the development of a probabilistic approach to determining MIC.

a. Planning Reserve Margin

For all of the reliability-related reasons identified in the Revised Proposal as well as for the reasons discussed above, we support the development of a Loss of Load Expectation method for determining PRM. Its use allows zones to have differing PRMs while achieving an equivalent level of reliability. In addition, it lends itself to developing a probabilistic assessment of MIC. We encourage CAISO to move forward with its development as quickly as possible.

b. Uniform Counting Methodologies

Wind and Solar

In our previous comments, we supported consideration of the Effective Load Carrying Capability (ELCC) methodology for assessing the capacity value of wind and solar resources, and we suggested CAISO provide information on alternative ELCC methods and propose an ELCC method or one of its less computationally challenging variants for consideration, if it is demonstrated to be comparably accurate.

We continue to support an ELCC methodology as the methodology that most fairly and appropriately reflects performance capabilities for wind and solar resources. As the Revised Proposal underscores, an ELCC approach probabilistically assesses the ISO's ability to serve load under uncertainty and represents a resource's capacity over a full 24 hour day.

We do not support use of an exceedance methodology. In addition to the disadvantages identified in the Revised Proposal, use of an exceedance method would be retrogression for

PacifiCorp, its stakeholders, and its regulatory communities. PacifiCorp did at one time use the exceedance method in developing its IRP. However, PacifiCorp is now using a modified ELCC approach.

We again recommend that the CAISO propose in its next revision an ELCC methodology.

c. Backstop Procurement Authority

We have no additional comments. We continue to support the proposal.

7. Other

Thank you.