

**Reliability Coordinator Services
CAISO Rate Design, Terms and Conditions Final Proposal
Comments of NaturEner USA, LLC**

Company	Contact Person	Date Submitted
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NaturEner USA, LLC, on behalf of its two wholly-owned, generation-only, balancing authority subsidiaries NaturEner Power Watch, LLC and NaturEner Wind Watch, LLC (NaturEner), appreciates the opportunity to comment on the Reliability Coordinator Rate Design, Terms, and Conditions Draft Final Proposal dated June 20, 2018 (Final Proposal) posted by the California ISO (the CAISO).

NaturEner assumes that other potential CAISO RC Customers will providing feedback on many of the same issues discussed by NaturEner below, other than perhaps given NaturEner’s somewhat unique characteristics NaturEner’s comments below regarding the draft Final Proposal’s inequitable proposed treatment of generation-only BAs.

As NaturEner has previously stated, to fulfill the responsibility of maintaining a reliable grid for the Western Interconnection, NaturEner believes that a single RC for the entire interconnection is the best model for reliability. Since, however, the single RC regime in the Western Interconnection will no longer be maintained, NaturEner is committed to participating in the CAISO’s outreach process to ensure that its choice for RC services provides the comprehensive framework for sustainable independent decisions driven by the best interests of the Western Interconnection.

To that end, NaturEner shares the CAISO’s goals that its RC program be reliable, robust, well-defined, economical, and equitable to its potential RC Customers, and NaturEner submits these comments with the hope and intention that they help the CAISO achieve those critical attributes.

Systems and System Integration Issues

We continue to have genuine concerns about the CAISO's proposed RC systems/technology and system integration issues. The CAISO should provide more information and transparency regarding the systems and technology it plans to use, so that potential RC Customers can review and hopefully get comfortable that the CAISO will both have the necessary systems and technology to properly perform the RC Services and timely obtain RC Certification, as well as offer their knowledge and input to help the CAISO's efforts in this regard proceed as efficiently, effectively and economically as possible. Such discussion and information is also needed to evaluate the management of seams issues among multiple RCs and to address and hopefully assuage related concern among potential RC Customers (as well as possibly other RCs) about technological compatibility and the use and upkeep of essential tools.

To that end NaturEner requests that the CAISO devote further attention to addressing potential RC Customers' concerns regarding the technology already selected by the CAISO to support its proposed RC operations. Many of the utilities currently customers of the incumbent RC, Peak Reliability, Inc. (Peak), have made significant long-term investments in EMS technology solutions to be directly compatible with the systems used by Peak. This was done to ensure seamless model, display and data exchange as well as for those using advanced applications; a consistent solution quality. This has provided a significant value proposition to the membership over a great deal of time which appears will no longer be available should members move to the CAISO. The CAISO's choice of a different EMS technology introduces a number of unknown and unaddressed issues regarding the items above and will introduce a significant amount of complexity in managing the day-to-day needs for affected entities' respective EMS systems. We request that the CAISO devote further attention to this important area and actively engage with potential RC Customers to quickly find meaningful ways forward to address these important issues.

NaturEner appreciates the Final Proposal's statements that the CAISO will facilitate the continuation of the Western Interconnection Tool (WIT) and that the costs for WIT will be included in the core RC Services rate. However, potential RC Customers need more detail and assurances that other important Western Interconnection tools will be maintained, that the CAISO and its RC Customers will have access to them, and their cost and how they will be paid. For example, questions remain as to the future of the EHV data pool and associated WON regarding administration, hosting, configuration, cost, etc. which have significant ramifications to situational awareness (and thus reliability) should the support or systems be unavailable in the future. The sooner potential RC Customers are provided further detail about and answers to these

questions, the faster and better they can evaluate and provide helpful input to the CAISO's RC Services proposal.

Modeling

The Final Proposal as part of its onboarding discussion on Page 11 includes the following statement, "Readiness implementation periods could run between 6 to 12 months depending upon whether or not the BA is already in the CAISO full network model (FNM), the complexity of the RC Customer's resource configuration and system topology, and the maturity of the RC Customer's Common Information Model (CIM). The CAISO along with the RC Customer, will determine the implementation based on these assessments." As described that proposed process seems backwards and thus potentially may make things more problematic and time-consuming than necessary. NaturEner suggests that the CAISO should already have, or should in the very near future have, consumed within the CAISO's RC system the FNM for the entire Western Interconnection in order for the CAISO to reliably and otherwise appropriately provide its proposed RC Services. Once that has occurred, NaturEner's understanding is that it should be a much faster and simpler process to then incorporate a new potential RC Customer and its related information in to the CAISO's RC system. Thus NaturEner believes that this process should be reordered such that the CAISO's first step in this process should be the CAISO's consumption within its RC system of the FNM for the entire Western Interconnection.

Staffing

NaturEner notes that the CAISO in its Final Proposal has nearly doubled the amount of FTE positions it believes will be needed from for it to properly perform the RC Services from what was 28-32 now is 55. While that appears to be a much more realistic figure, NaturEner remains concerned that even with that higher figure the CAISO may still be underestimating the number of FTE positions needed for the CAISO to properly perform the RC Services.

The CAISO should provide transparency into any benchmarking that was done to develop this current staffing proposal, including further detail as to how the CAISO plans to address the September 8, 2011 event findings. Also, even with the CAISO's increased figure of 55 FTE positions, that number still seems much lower than Peak's estimated figures even after the CAISO departs from Peak's footprint.

To help potential RC Customers evaluate and provide helpful feedback to the CAISO, the CAISO should also provide further information showing it has taken into account in its RC Services pricing estimates that it is using realistic estimates of the manpower that will result among other things from the Systems/Technology, tools, and seams issues

which have been discussed above and are certain to arise. The last thing anyone should want is for decisions to be made on financial information that turns out to be faulty or incomplete, and then risk the CAISO seeking to materially increase the charges to RC Customers to support the costs necessary to provide the RC services – as it is the approximately doubling of the estimated number of FTE positions from 28-32 appears to be the main driver behind the Final Proposal's increase in the CAISO's estimated annual proposed costs for RC Services from approximately \$12 million to \$18.5 million (a 35% increase) .

Reliability Coordinator Funding Requirement, Rate Design and Projected Costs

NaturEner is concerned that between the CAISO's release of its Straw Proposal on April 5 and its release fewer than three months later of its Final Proposal the CAISO has revised the expected cost for it to provide the RC Services up from over 35% (from approximately \$12 million to \$18.5 million), with a concurrent estimated escalation in rates from what was a range of \$0.022 / MWh to \$0.027 / MWh now to \$0.034 / MWh to \$0.041 / MWh. In fact, Page 27 of the Final Proposal seems to warn that the rates could be as high as \$0.06 / MWh.

NaturEner is worried that even with the CAISO's now higher projected costs, the actual amounts could be even higher given the above-mentioned concerns and open questions regarding systems and technology issues, Western Interconnection Tools other than the WIT which the cost of which the Final Proposal indicates is now included in the CAISO's currently-estimated rate, and whether staffing is adequate including to address needed related issues including technology and seams issues. Clearly, cost savings is a key benefit that the CAISO has pointed to in its provision of RC services compared to other alternatives, and the sooner it can get potential RC Customers comfortable that it has a secure handle on the RC Services costs, the better.

NaturEner appreciates that the CAISO sets its revenue requirement pursuant to its stakeholder process, which, in theory, should allow for input and feedback by RC services customers. However, as stated in its earlier comments to the Straw Proposal NaturEner remains concerned that because RC services customers will represent a small segment of CAISO's general stakeholder pool, that RC services customers will be unable to determine or have meaningful input or impact on those portions of the revenue requirement that are specific to RC services. NaturEner requests further clarification as to what role the CAISO envisions RC services customers playing in the stakeholder process, and how that process will be run going forward once the CAISO's RC function has been stood up and certified, and believe that the oversight committee should be required to be involved in this process.

A. Funding Calculation for Generation-Only BAs – The CAISO’s Funding Proposal for Generation-Only BAs is Inequitable: Under the existing Funding Agreement, Peak calculates the parties’ fees based upon their net load. Generation-only BAs such as NaturEner’s, pay a minimum annual charge of the lower of \$10,000 or 0.015% of the final funding amount for any calendar year, with the minimum charge able to be adjusted on written approval of not less than 75% of the Peak Funding Parties, with such charge however not permitted to exceed \$10,000 for any calendar year of the Initial Term. Peak’s offering is justified because generation-only BAs typically have small footprints, do not operate transmission or load, and have a limited impact to the BES.

As NaturEner previously pointed out in its comments to the Straw Proposal, by comparison, under the current CAISO rate proposal, using a volumetric billing determinant of Net Generation (NG) MWh for generation-only BAs, NaturEner’s internal analysis indicates that NaturEner would have to pay many times its current annual cost for the CAISO’s RC services as compared to what Peak is currently charging. This is contrary to the CAISO’s statements that it can provide RC services at a substantially reduced cost, and in fact under this proposal, generation-only BAs will be expected to pick up a larger share of RC costs. This might make sense if generation-only BAs were a proportional driver of higher RC related expenses, but as mentioned in the prior paragraph they are not. Similarly, on Page 5 of the Final Proposal, the CAISO outlines several core RC service offerings that do not apply to generation-only BAs.

NaturEner would like to see pricing for generation-only BAs which provides better, or at the very least equal, treatment for such BAs as compared to the current Peak Funding Agreement. The costs for the CAISO’s RC services for generation-only BAs should less than (or at the very least no more) than what they currently pay to the incumbent RC.

In its May 31 response to the stakeholder input to the Straw Proposal, the CAISO claimed that “Generator Only BA’s will receive the same NERC Reliability coordinator services as those BA’s with load...” as justification for its proposal to charge generation-only balancing authorities the same rate as other balancing authorities. As discussed below, that claimed justification is not true, resulting in unfair and inequitable treatment for generation-only BAs, and NaturEner strongly disagrees with the Final Proposal’s proposed funding calculation for generation-only BAs. The following factors support that NaturEner’s arguments for a more fair and equitable funding calculation for generation-only BAs.

- 1) Importantly, NaturEner's BAs (and other generation only BA's of similar size and makeup) more closely match the CAISO definition of "Minimum charge" in that the plant(s) have relatively low MWh volumes of generation on a relatively uncongested transmission network and currently do not require the significant level of oversight, management and contingency analysis services a load serving BA does.
- 2) Outage coordination for non-emergency outages for our two and other generation-only BAs typically amount to one clearance a year (i.e., one for each generation plan within a generation-only BA). The incremental cost of processing is next to nothing.
- 3) NaturEner's BAs do not use and hosted apps or situational awareness tools and the CAISO would be modeling and provisioning such tools whether NaturEner was an RC Services Customer or not.
- 4) Similarly data exchange for operational analysis and RT-awareness is a need for the CAISO regardless of generation-only BAs participation and these systems would be modeled and populated with data. The sunk cost for provisioning a point which will undoubtedly exist to be read or write in any data exchange system(s) has an effective marginal cost of "0".
- 5) As already recognized by the CAISO, the SOL methodology aspects do not apply to a generation-only BA.
- 6) As also already recognized by the CAISO, the system restoration coordination and training aspects do not apply to a generation-only BA.
- 7) Likewise with Centralized messaging (RMT replacement), Stakeholder workgroups, and document management and exchange; the incremental cost to support generation-only BAs is negligible.
- 8) The separate "Data Exchange " item appears to be a duplicate of 4 above, but again these system and data points would need to be present whether receiving them directly from a generation-only BA or another RC and there is no additional cost involved.
- 9) Generation-only BAs do not require EOP-011 support other than a basic review of the plan, as a majority of the standard in R2 does not apply as such BAs serve NO LOAD.

- 10) Power System Network modeling to support whatever advanced application is being provisioned (SE, CA, etc.) has no incremental cost associated with generation-only BAs. For example our BAs are STATIC generation-only and have not changed characteristics since going operational unlike typical load-serving BAs which continuously change internal electrical characteristics. The CAISO will undoubtedly leverage the Peak RC WWM CIM export as a starting point regardless and the incremental cost whether or not generation-only BAs participate is again "0".

The amount of attention and resources the RC must devote to a generation-only BA and the risk of a generation-only BA are far less than a load-serving BA, and it is inequitable to charge generation-only BAs the same dollar / MWh rate.

The CAISO began its RC Services solicitation effort with the statement that it would provide services at ½ the cost or less than Peak RC customers currently pay. Instead, the CAISO's draft Final Proposal proposes to charge NaturEner, using the CAISO's recently-increased proposed rate of \$0.041 / MWh up to possibly \$0.06 / MWh anywhere up to 400% - 600% higher than the rates it currently pays to Peak. We expect the CAISO to maintain its commitment to this claim and re-evaluate its position regarding generation-only BAs and the benefits they provide to the grid.

- B. Minimum Charge:** NaturEner seeks clarification as to how the minimum charge was developed. The CAISO should provide more information regarding the formula for determining this charge, whether the figure will change based on expenses and what threshold/criteria will be used to determine a low MWH volume of generation or load. As mentioned above, it also makes sense to have the minimum charge be the lesser of a certain figure and a percentage of the total funding needs as is currently the case under the Peak Funding Agreement.
- C. Funding Requirement:** Given the previously-mentioned large projected cost increases that have occurred just in the fewer than three months between the CAISO's April 5 Straw Proposal and its June 20 Final Proposal (from approximately \$12 million to \$18.5 million, an approximately 35% increase), NaturEner has concerns as to whether the CAISO has accurately projected the total cost for RC Services and even deeper concerns that the CAISO may attempt to increase the costs on a going-forward basis. NaturEner proposes no more than a 3% cap on year-over-year increases unless approved by the RC funding parties for a special assessment. While NaturEner understands that

such a cap may need some exceptions if there was a large default or a large customer were to exit, that is a prospect beyond the CAISO's control, whereas a significant underestimation of the RC Services costs, especially when premised on an at least 50% reduction under current Peak costs is a result from circumstances within the CAISO's control. NaturEner requests that the CAISO consider and include in the final approved Rate Proposal some reasonable and meaningful provisions protecting potential RC Customers from material year-to-year price increases, especially those not due to either a large default by an RC Customer or an exit by a large RC Customer.

D. FERC/NERC/WECC Penalties: The Final Proposal provides that “the CAISO tariff sets forth a process by which the CAISO may seek, with FERC approval, to allocate reliability-related penalty costs assessed by FERC, NERC or WECC to specific entities whose conduct was found to have contributed to such penalty and to recover costs associated with such penalties from CAISO RC Customers.” Based on the CASIO's statements it is NaturEner's understanding that the CAISO tariff currently allows it to make a filing at FERC to allocate penalties to the entity whose conduct gave rise to the event. We remain concerned about how this framework would work in the provision of RC services where the RC itself is penalized, and do not support the importing of this CAISO tariff provision into the RC function. Although NaturEner has read the CAISO's explanation for this proposed provision, NaturEner continues to believe that the better approach is one where the cost of any penalty or remedial action that is assigned to the RC is allocated among those receiving RC services along the same formula as annual expenses. We do not view an approach where the RC pursues individual entities receiving RC services for allocation of penalty or mitigation costs assigned to the RC as a beneficial one or one where the time spent in the filing to authorize the recovery of funds is warranted. Unless required (the Final Proposal seems to suggest it, however, the Final Report says that it has never used that penalty provision thus raising a question regarding whether inclusion of the provision is in fact required), NaturEner would suggest that this provision be deleted.

E. RC Settlements Process: NaturEner supports the Final Proposal's proposition to invoice RC Customers annually on January 1 for RC Services provided for that calendar year with payment due by January 31 of that same year (thus a 31-day payment deadline). The Final Proposal also states that an information statement containing the RC billing data volumes submitted by RC Customers will be published by October 30. NaturEner suggests that for all potential RC Customer budgeting purposes, that on that same October 30 date or as soon thereafter as

possible, that the CAISO also publish the RC rate to be charged or the minimum charge for an entity if applicable, such that entities have an adequate opportunity to budget for the upcoming calendar year.

RC Services Agreement

The CAISO's May 30 response to comments attaches the CAISO's draft proposed *pro forma* Reliability Coordinator Services Agreement (RCSA). As most of the substantive content proposed by the CAISO are to be included in the RCSA by incorporation by reference to the CAISO's tariff regarding RC Services, which draft tariff language the CAISO has yet to release, NaturEner does not have many substantive comments to the RCSA at least at this time other than as set forth in the following four paragraphs, and will await its opportunity to review and comment on the CAISO's proposed tariff language once it is released.

Given that way in which the CAISO has proposed to structure the RSCA, NaturEner is unclear as to the necessity, import or appropriateness of RSCA Section 3.2 which provides that "The RC Customer agrees to comply with the provisions of Section X.X of the CAISO Tariff that are applicable to its NERC designated function." The inclusion of such a provision may not be necessary, appropriate or correct, however, without knowledge of the tariff language to be incorporated, NaturEner is unable to provide a meaningful comment to it. As a point of reference, NaturEner's recollection is that the Peak Funding Agreement does not include any such provision.

The RSCA should be revised to clarify that an RC Customer may give its 12-month exit notice during the initial 18 month period, with such termination to be effective only after expiration of that 18 month initial commitment period. NaturEner understands that is what the CAISO intends and what should be the case (and not for example that an RC Customer must wait for the expiration of the 18 month initial commitment period before then providing its 12 month exit notice), however, the language of Section 3.2.2 is currently ambiguous (or perhaps even to the contrary), and as such NaturEner believes that such language should be revised to make that clear.

While NaturEner understands the need for the CAISO to protect its finances by collecting the amounts owed to it by an RC Customer who has not paid its bill for the services it receives, NaturEner is concerned that the CAISO's termination timelines may be too short, given the extreme consequences that such termination may have both on that entity whose RSCA is proposed to be terminated as well as the CAISO's other RC Customers and the Western Interconnection in general. Similarly, the termination grounds of "any material default under this Agreement" are difficult to evaluate at this time without the tariff language to be incorporated into the RSCA, may not even be appropriate (see discussion two paragraphs above), and what constitutes a "material

default under this Agreement” should both be clarified as much as possible as well as limited to the greatest extent possible.

NaturEner also notes that transition assistance contemplated to be provided by the CAISO referred to in Section 3.2.3 may be essential, even if the termination is the result of a default by the RC Customer, and suggests that the CAISO consider revising the provision to include language ways it could both be protected (e.g., requiring advance payment or a form of security) and also provide such an entity with needed transition assistance, and thus that Section 3.2.3 be revised to permit assistance even to RC Customers which have defaulted as long as certain reasonable requirements are met.

RC Implementation Oversight and RC Operations Oversight

NaturEner supports the idea of the interim Reliability Coordinator Project Steering Committee (RPSC) and supports the establishment of an oversight committee as generally described in the Final Proposal which will be recognized upfront in the CAISO’s tariff as long as the powers of such committee are clearly defined to actually provide meaningful input to and oversight of CAISO management on material issues relating to the CAISO’s RC function. The oversight committee’s independence, experience and deep knowledge and relationships in the Western Interconnection will be critical both to perform its oversight function and to provide the greatest benefit to the CAISO in performing its RC function. If the charter and the tariff language are not clearly or properly documented to provide such abilities, much of the value and comfort to potential RC Customers will be absent.

Reliability Coordinator Onboarding Process and Initial Commitment and Exiting Process

A. Onboarding Process: The Final Proposal clarifies that the CAISO is proposing staggered onboarding integration with one, first spring of 2019 start date being applicable only to internal CAISO TOPs and TOPs within the CAISO’s BAA, and one second start date in the fall of 2019 for all other BAs and TOPS outside of the CAISO’s BAA who wish to receive RC Services from the CAISO and who will be part of the CAISO’s initial RC footprint. NaturEner supports that fall 2019 single start date for all such other BAs and TOPS outside of the CAISO’s BAA, and again suggests that that start date be the lowest common denominator of readiness for all entities that commit.

NaturEner also continues to advocate that the onboarding should also include a detailed transition plan that ensures coordination among the different RCs and complete coverage of all BAs and TOPs. Under no circumstances should the CAISO’s transition to an RC services provider leave any BA or TOP without an RC for even a short period of time. The CAISO, in conjunction with the incumbent RC

Peak, any other potential RCs, WECC and NERC must work together ensure that no entities are abandoned as part of any evolution of RC services in the Western Interconnection.

B. Initial Commitment; Exiting Process: NaturEner believes that both the initial commitment of 18 months and the exit provision of one year are appropriate. NaturEner supports the CAISO's proposal that entities should only be able to withdraw (after having provided the requisite at least one year's advance notice) at specified times during the year, however, NaturEner believes that having only one such date, both to leave and to join (the Final Proposal suggests April 1) is too limiting, especially since other entities offering RC services may have other defined start dates. NaturEner suggests that there be at least two such dates (e.g., one in the spring and one in the fall). Also, as mentioned in the comments above to the proposed *pro forma* RCSCA, the Final Proposal should be revised to clarify that an RC Customer may give its 12-month exit notice during the initial 18 month period, with such termination only be effective after expiration of that 18 month initial commitment period (and not for example that an RC Customer must wait for the expiration of the 18 month initial commitment period to even then provide its 12 month exit notice).

Appendix 3: Supplemental Services

NaturEner interprets the last paragraph on Page 14 of the Final Proposal that supplemental revenue that the CAISO receives from RC service members utilizing Supplemental Services to mean that such supplemental revenue should be credited to RC Services-related ABC process and task codes to properly offset the fees the CAISO charges to its RC Customers. Assuming NaturEner's interpretation is correct, NaturEner supports that concept.