Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the ESDER Phase 2 stakeholder initiative Issue Paper posted on March 22 and as supplemented by the presentation and discussion during the stakeholder web conference held on April 4, 2016.

Submit comments to InitiativeComments@CAISO.com

Comments are due April 18, 2016 by 5:00pm

The Issue Paper posted on March 22 and the presentation discussed during the April 4 stakeholder web conference may be found on the ESDER Phase 2 webpage.

Please provide your comments on the Issue Paper topics listed below and any additional comments you wish to provide using this template.

NGR enhancements

The CAISO is proposing to explore two possible areas of NGR enhancement: (1) representing use limitations in the NGR model, and (2) representing multiple configurations in the NGR model.

The CAISO is requesting stakeholders provide comments and consider the following:

- Are these two possible areas of NGR enhancement the highest priority NGR enhancements to pursue in ESDER Phase 2?
- Are there other areas of NGR enhancement that are of higher priority that should be pursued instead? If yes, which ISO-proposed NGR enhancement should be omitted from the scope?
- Please provide examples of use cases that support the NGR enhancements you view are of the highest priority and should be pursued in ESDER Phase 2.

Comments:

[insert comments here]

Demand response enhancements

The CAISO is proposing to explore two possible areas of demand response enhancement: (1) Exploring the ability for PDR to be dispatched to both curtail and increase load, and provide regulation service; and (2) developing alternative baselines to assess the performance of PDR and RDRR.

The CAISO is requesting stakeholders provide comments on these two areas of enhancement and consider the following:

Demand response enhancement topic area #1 – Ability for PDR to both curtail and consume energy:

- What issues does this working group need to address and resolve to enable load consumption capability? For example:
    - How would financial settlements work given wholesale bids cause an increase in retail consumption and demand?
    - What does consumption mean? Is consumption when a load exceeds its "normal" maximum consumption at certain times or under certain conditions?
    - What are appropriate baselines/Performance Evaluation Methods?
    - Is there any differences if load consumption results from a BTM device versus true load consumption?
    - Retail and wholesale impacts of over or under performance?
    - CAISO Grid Management Charges for load consumption?
- Are any state policies impacted by wholesale-directed retail load consumption?
- Suggest a proposed schedule and milestones for working group to deliver a Draft Final Proposal by September 8, 2016 (use the stakeholder process schedule on pages 22-23 of the March 22 Issue Paper as a guide).

Comments:

[insert comments here]

Demand response enhancement topic area #2 – Alternative baselines to assess the performance of PDR/RDRR:

- What baseline methods should the CAISO add and why?
- If a performance method is recommended that requires a control group, how would third parties be able to cost-effectively set-up and operate control groups? Are there services the UDC could provide in this area?
- What tools and capabilities will the CAISO require to assess best fit for different types of PDR aggregations?
- Suggest a proposed schedule and milestones for working group to deliver a Draft Final Proposal by September 8, 2016 (use the stakeholder process schedule on pages 22-23 of the March 22 Issue Paper as a guide).

Comments:

[insert comments here]

Multiple-use applications

To avoid redundant and potentially divergent efforts the CAISO will initially address this topic by participating in the CPUC Order Instituting Rulemaking (R.) 15-03-011, Track 2. The CPUC and CAISO are planning to hold a joint workshop May 2-3, 2016. If the CPUC proceeding identifies issues that should be addressed in a CAISO initiative, or develops proposals the CAISO should consider formally adopting, the CAISO can open a new initiative or expand ESDER Phase 2.

The CAISO is requesting stakeholders provide comments on this topic area as well as this proposed approach.

Comments:

[insert comments here]

Distinction between charging energy and station power

Under this topic the CAISO intends to resolve the distinction between wholesale charging energy and station power. Although this is also a topic in Track 2 of the CPUC's energy storage proceeding, station power is specifically addressed in the CAISO tariff and the CAISO will primarily address this issue in ESDER Phase 2. However, because the question of station power is inherently jurisdictional, the CAISO intends to also contribute to this topic in Track 2 of the CPUC's energy storage proceeding as may be necessary. In doing so the CAISO will seek to economize its staffing resources where possible and avoid redundant efforts, and will also seek to avoid the conflicts that have arisen in the past over the wholesale/retail line.

The CAISO is requesting stakeholders provide comments on this proposed approach as well as respond to the following questions:

- Should the CAISO modify its definition of station power to better accommodate energy storage resources?
- Should battery temperature regulation be considered part of charging (similar to efficiency loss) and subject to a wholesale rate, or should it be considered consumption/station power subject to a retail rate (where consumption exceeds output in an interval)?
- Are there any means besides separately metering the storage device by which the CAISO should distinguish between charging and station power?

Comments:

[insert comments here]

Review allocation of transmission access charge to load served by DER

The CAISO is proposing to review the rules for determining load subject to the transmission access charge (TAC) to reflect the effects of utility-side distributed generation, as proposed by Clean Coalition.

The CAISO is requesting stakeholders provide comments on this topic area. In particular, please comment on the three concerns the CAISO raised in the issue paper, and if possible offer examples to help illuminate these concerns.

1. Transmission investment is mainly driven by peak load conditions, which may not be reduced by adding distributed generation (DG).
2. New DG does not offset the cost of transmission that was previously approved and is currently in service.
3. Exempting some load from TAC charges would not decrease PTO revenue requirements, so some costs would be shifted to other customers.

Comments:

HORUS Central Valley Solar 1, LLC and HORUS Central Valley 2, LLC (collectively "HORUS") submits this input to the CAISO's ESDER Phase 2 issue paper due to its development of the San Luis Solar Project ("SLSP" or "the Project"). SLSP is a 25 MW AC solar generation and a 12 MW energy storage project in the permitting phase of development on federal land with a planned COD of July 2017. The specific issue of concern to HORUS is the allocation of transmission access charges to distributed energy resources. Environmental documents prepared pursuant to the National Environmental Policy Act have been circulated to the public by the Bureau of Reclamation and will be completed in final in the near future. SLSP will be interconnected to the Western Area Power Administration ("Western")transmission facilities at the O'Neill substation which is a non ISO Grid facility in the San Joaquin Valley, pursuant to Western's FERC approved Open Access Transmission Tariff. Western's facilities are then interconnected with the CASO Grid at junction with a 70 kV radial line to Los Banos Substation.

The project is intended to serve pump load of the Bureau of Reclamation behind the meter, provide commercial customers with renewable resources under power purchase agreements, and provide renewable energy storage performance attributes. In recent discussions with CAISO staff and management, HORUS was advised that to accomplish its objectives with SLSP, participation in a stakeholder process with subsequent regulatory changes would be needed as it was believed that the current CAISO tariff and business practices may not allow for all facets of HORUS objectives.

The SLSP is a multiple use application per section 3.3 of the CAISO ESDER Phase 2 Issue paper. It will assist the Bureau of Reclamation and Western in efficiently meeting their load and delivery obligations, respectively, for the load of federal pumps interconnected to O'Neill Substation at 4,760 volts at the edge of but not a part of, the CAISO Grid. These pumps deliver water to meet municipal, irrigation and wildlife agency demands in the San Joaquin Valley. SLSP will also deliver solar output across the CAISO Grid to municipal customers in adjacent balancing authorities, and/or will sell output and energy storage services into CAISO energy markets as an energy only resource. The project does not seek to provide resource adequacy payment, nor does it provide energy to any distribution load subject to the jurisdiction of the California Public

Utility Commission. The SLSP has completed system impact studies for Western pursuant to the Western OATT with input from adjacent systems including the CAISO and PG&E that concluded that SLSP does not adversely impact adjacent transmission systems.

HORUS faces challenges under the existing regulatory construct in that costs of paying the CAISO transmission access fee on the total pump load and solar power plant production are economically prohibitive to the full development of project potential. Due to prohibitive provisions of the existing CAISO tariff as represented to HORUS by CAISO staff, SLSP proponents and beneficiaries will be burdened with paying Transmission Access Charge on all pump load and solar generation, even though a significant portion of the pump load will be served behind the meter by solar generation, unloading rather than using the CAISO Grid. HORUS seeks alternative TAC treatment for O'Neill pump load so it can serve a portion of that load with SLSP generation and not trigger TAC on that load.

HORUS will, and understands that Reclamation, Western and the SLSP output purchaser will, if successful in achieving their objectives expressed herein, make full operating information available to the CAISO, complete the CAISO's New Resource Implementation process, execute appropriate CAISO contracts, and ensure that any reserve or reliability issues are addressed fairly and fully.

There are other relevant factors that warrant consideration in light of the points raised in the CAISO ESDER issue paper section 3.5 on TAC allocation. Western and Reclamation have paid the full cost of the PG&E transmission facilities used to deliver Reclamation's self- generated hydro-electric power from its Tracy substation to its load at O'Neill Substation since 1966 under a long term transmission contract with PG&E that expired in March of 2016. The ability to serve Reclamation pump load behind the meter to reduce TAC applicable to Reclamation load will not leave any unpaid cost of CAISO transmission facilities as these costs for used facilities have already been recovered. Further, Western is in advanced stages of planning and permitting a Western owned transmission interconnection of the O'Neill and San Luis substations to its Tracy substation, incorporating these loads in to the Balancing Authority of Northern California by 2023. This facility has also been studied pursuant to the Western OATT and found not to adversely impact adjacent transmission systems.

In conclusion, HORUS believes that, due to the unique facts and circumstances relevant only to this project and its objectives, HORUS and other SLSP beneficiaries should receive the treatment sought herein. HORUS further believes that for the reasons presented, none of the concerns expressed by the CAISO in tis ESDER Phase 2 issue paper should constrain, limit or preclude the outcome sought by HORUS.nsert comments here]

Other comments

Please provide any comments not associated with the topics above here.

Comments:

[insert comments here]