

PG&E's Comments

Reactive Power and Financial Compensation

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PG&E appreciates the opportunity to comment on CAISO's "Reactive Power and Financial Compensation" Straw Proposal dated, August 13, 2015. In summary, CAISO's Straw Proposal:

- Proposes uniform requirements for resources, including asynchronous resources, to provide reactive power capability and automatic voltage control.
- Suggests capability payments for new resources that demonstrate that they have not been otherwise compensated for their reactive power capability.
- Considers a new exceptional dispatch category for resources that only provide reactive power and would not be picked up in the market optimization (e.g., for "fast responding" resources or resources only providing reactive power) and suggests compensating these resources for their variable (O&M and energy) costs to provide reactive power.
- Clarifies that under the current tariff cost allocation for voltage support is allocated to load.

In response, PG&E offers the following comments:

- PG&E supports CAISO's proposal to apply the uniform requirements beginning with cluster 9 resources and to exempt projects that are already in the CAISO interconnection process or connected to the CAISO grid.
- PG&E supports CAISO's proposal to eliminate capability payments for existing resources. However, PG&E opposes CAISO's proposal to establish reactive power capability payments for new, repowered or uprated resources.
- PG&E seeks further clarity regarding the new provision payment for asynchronous resources providing reactive power under low or no active power output.
- PG&E believes the CAISO must address cost allocation in its forthcoming revised Straw Proposal if CAISO provides additional compensation mechanisms for reactive power.
- PG&E requests further clarity for reactive power requirement definition in straw proposal for; a) maximum real power capability; b) minimum continuous/dynamic reactive capability requirements for different voltage levels (figures 2 & 3).

A. PG&E supports the CAISO’s proposal to establish the uniform requirements beginning with cluster 9:

In CAISO’s August 20th presentation,¹ CAISO questioned which would make the best effective criteria: 1.) a cutoff date, 2.) a cluster criteria, or 3.) If other considerations are needed. PG&E supports CAISO instituting a reactive power requirement for a targeted cluster; specifically cluster 9 resources (not earlier clusters). PG&E prefers this approach to a cutoff approach date because a cutoff date may result in situations where the new requirements were not considered in the negotiating process; as a result this would require re-negotiating some of the existing contracts and result in a delay of their executions.

PG&E’s interpretation of the straw proposal is that the current projects in the queue and interconnected resources are exempted. Modifying the current process for the purpose of the uprate is a subject to be discussed in the stakeholder process.

B. PG&E supports CAISO’s proposal to eliminate capability payment for existing resources. However, PG&E opposes establish reactive power capability payments to new, repowered or uprated resources where compensation has not been provided for in the contracts.

As stated in PG&E’s June 11, 2015 comments on CAISO’s “Issue Paper”², PG&E opposes capability payments for reactive power. The CAISO market construct and the current CAISO Tariff do not support and justify such capability payments, and we do not believe that providing reactive power capability payments will improve market reliability or efficiency. Providing reactive power by generating resources (synchronous and asynchronous) in the normal range is viewed as a necessary condition for conducting business.

PG&E requests additional information on how exactly the CAISO envisions determining which parties already have reactive power capability compensation. PG&E does not believe it is appropriate for CAISO to interpret contracts, questions whether parties have the ability to share contract language with the CAISO, and believes such a compensation process could have adverse outcomes to the contracting process.

PG&E believes that CAISO’s intervention to compensate asynchronous resources where compensation occurs in the contract will inappropriately interfere with the contracting process. Furthermore, by offering reactive power capability compensation to those asynchronous resources without contractual compensation, CAISO creates bad incentives for contracting parties. More specifically, it incents parties not to include the reactive power capability compensation in contracts.

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http://www.caiso.com/Documents/Agenda_Presentation_ReactivePowerRequirements_FinancialCompensationStrawProposal.pdf

² PG&E Comments on Issue Paper 2.A & 2.B http://www.caiso.com/Documents/PG-Comments_ReactivePowerRequirements_FinancialCompensation-IssuePaper.pdf

Lastly, PG&E believes that the proposed methodology for new asynchronous resources could be potentially discriminatory against other generation resources, opening the door for all resources to argue for reactive power compensation.

C. PG&E seeks further clarity regarding the new provision payment for asynchronous resources providing reactive power under low or no active power output

PG&E believes that providing reactive power should be limited to a threshold active power output (e.g., 20% of the nominal resource output) as a must have capability for asynchronous resources. However, if such capability below the threshold value can be provided by these resources, CAISO may utilize it and resources should not disable it without CAISO notification.

Since there are transmission network resources which are providing the required reactive power without any additional cost to the system, utilizing such capability should be limited to the rare situations where there is not enough reactive power provided by transmission assets. Furthermore, any payment will be justifiable only when the asynchronous resource itself is not the source for such reactive power need.

CAISO needs to provide a detailed payment methodology indicating whether it is an out of market payment and how it interacts with transmission network services (e.g., reactive power support). PG&E would also request specific example of how this payment methodology will work.

D. PG&E strongly encourages the CAISO to more thoroughly address cost allocation issues in its forthcoming Revised Straw Proposal.

PG&E reiterates its previous comments for cost allocation. As stated in the comments for Issue Paper³, PG&E requests that CAISO outline in its revised Straw Proposal how these new payments will follow CAISO's Cost Allocation Guiding Principles,⁴ especially the cost causation principle.

E. PG&E requests more clarity for reactive power requirement definition in straw proposal.

In sections 5.2 and 5.3 of the straw proposal the following terms are used "maximum real power output", "maximum real power capability", "rated MW capacity" and "real power capability". It is recommended that CAISO to utilize common terminology as much as applicable to avoid confusion.

³ PG&E Comments on Issue Paper 2.C http://www.caiso.com/Documents/PG-Comments_ReactivePowerRequirements_FinancialCompensation-IssuePaper.pdf

⁴ Cost Allocation Guiding Principles Draft Final Proposal. CAISO. March 15, 2012.

PG&E seeks clarity for continuous and dynamic reactive power requirement under different voltage levels (combination of figures 2 & 3).

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