Comments of Pacific Gas and Electric Company on the 2013-2014 TPP 2nd Stakeholder Meetings and the Non-Conventional Alternatives Methodology

Submitted by	Company	Date Submitted
Mark Higgins *mark.higgins@pge.com* *415-973-5657*	*Pacific Gas and Electric Company (PG&E)*	*October 10, 2013*

Comments

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to participate in the annual Transmission Planning Process ("TPP") stakeholder process. PG&E submits these comments on the September 25-26, 2013 meetings and the CAISO white paper entitled "Consideration of alternatives to transmission or conventional generation to address local needs in the transmission planning process," published September 4, 2013 (the "Alternatives White Paper"). As always, PG&E looks forward to continued involvement in the TPP.

PTO Submissions

On September 26, 2013, San Diego Gas and Electric Company (SDG&E) presented four alternatives for a proposed new high voltage transmission line that would reduce local capacity requirements in the San Diego local area[1]. Some of these alternatives have also been presented in testimony provided in Track 4 of the 2012 Long-Term Procurement Plan (LTPP) proceeding[2]. The consideration of these alternatives is driven by the increase in local capacity requirements given that the San Onofre Nuclear Generating Station ("SONGS") is no longer in operation[3].

Cost estimates for the four alternatives presented by SDG&E range from $1.6 billion to $5.7 billion. In particular, cost estimates for the Imperial Valley Substation to a new north inland substation project assuming a combination of overhead and underground lines (identified as Alternative 1B) range from $4.7 billion to $5.7 billion. As such costs could significantly impact rates on a system-wide basis, the CAISO should carefully consider the costs of each alternative

[1] SDG&E, "2013 Grid Assessment Results," 2013/2014 Transmission Planning Process Stakeholder Meeting, September 25-26, 2013, p. 9 (page 11 of PDF document located at http://www.caiso.com/Documents/Presentation-PreliminaryReliabilityAssessmentResults-Sep26_2013.pdf)

[2] 2012 LTPP (R.12-03-014), SDG&E Opening Testimony of John M. Jontry, p. 13.

[3] 2012 LTPP (R.12-03-014), Revised Scoping Ruling and Memo of the Assigned Commissioner and Administrative Law Judge, p. 4.

as part of its assessment process, as well as consider the wide variety of other options to meet local reliability needs in southern California without SONGS that have been presented for consideration in Track 4 of the 2012 LTPP. PG&E urges the CAISO to work closely with the California Public Utilities Commission to evaluate the relative costs, benefits, and risks of approving alternatives to meeting those needs giving equal consideration to transmission, generation, and demand-side resources.

Alternatives White Paper

PG&E commends the CAISO for its efforts to develop a consistently applied methodology to evaluate non-conventional alternatives in the transmission planning process. We support the CAISO's desire to develop a more analytical way of evaluating non-conventional alternatives. The analyses provided by the CAISO with respect to how the new methodology is to be applied in specific local pilot areas is elucidating and shows how such an analytical approach can identify particular resource attributes that would fulfill a need.

With that in mind, PG&E provides the following feedback on the methodology and its application in the 2013-2014 TPP and beyond:

1. During the September 18 stakeholder call, the CAISO stated that it accounted for energy efficiency as load reduction in the pilot areas, but that it felt that existing demand response ("DR") products did not have attributes that aligned with system needs. Therefore, existing DR was not included in developing the load curves. PG&E believes the CAISO should more clearly articulate how it evaluated existing and planned demand side management (e.g., energy efficiency ("EE"), DR, storage, and distributed generation ("DG")) and incorporated these into its base case used for the analysis. The following questions arise:

    - How did the CAISO determine that only fast response resources could meet local area needs?
    - Did the CAISO's incorporation of demand side resources (i.e. EE) into the base case load curve include both existing EE programs and future savings reasonably expected to occur due to both voluntary programs funded through utility rates and changes in state and federal building codes and appliance standards?
    - Did the load curves include projected savings from customer-side DG as forecasted by California Energy Commission ("CEC") staff and vetted in the Demand Analysis Working Group ("DAWG") and CEC IEPR stakeholder process? If not, PG&E encourages the CAISO to consider these points in these forums, as the CAISO is already engaged in additional collaboration with the IOUs, CEC, and the DAWG to refine the process by which these business as usual savings (including all reasonably expected to occur future savings) can be allocated to LCRs and included in the TPP and the CPUC's LTPP.

2. While PG&E recognizes that day ahead DR may not be appropriate to meet all system contingencies, PG&E does not believe the CAISO needs to rely solely on fast operating resources to meet reliability needs. Day-ahead DR can also play a role in changing the load shape in a way that would alter the attributes of fast response resources needed, and can be a far more cost-effective, simpler solution to address certain types of local reliability concerns. Fast response resources should only be needed to respond to changes in load that could not be forecasted in advance, such as unplanned line outages.
3. There appears to be an assumption that DR needs to be automated ("Auto DR") in order for it to be reliable and predictable. We would like to point out that this is not a correct assumption. Most importantly, DR needs to be able to be forecasted accurately (which is something that PG&E has already been doing at a reasonably accurate level). This is particularly true for DR that is not "fast".
4. PG&E supports the CAISO's overall methodology and approach for analyzing the potential of non-conventional alternatives in the TPP process as described in section 5 of the Alternatives White Paper. Following are our suggested changes to enhance the proposed methodology:

    - As expressed on the TPP conference call, PG&E urges the CAISO to consider incorporating <u>all</u> existing and planned Demand Side Management (EE, DR, PLS, storage and DG, collectively "DSM") into the initial analysis as a prerequisite to step one to ensure that non-conventional resources are properly included in the TPP process consistent with the loading order. The need for new DSM will be more reasonably expressed if these are included.
    - The catalog developed in step one of the process[4] should also include the following:
        - Expected life of the resource– e.g., availability for 1 year, 5 years, 10 years, or longer
        - Location of the resource– The location of the resource may have an impact on the performance in the transmission planning process
        - Use of the resource– Whether the resource dedicated for use as an alternative to transmission or conventional generation to address local needs
    - All resources developed in step one for the catalog need not necessarily have a fast response time. EE and storage, once installed, can reduce peak demand. Also, day-ahead DR and other DR that has a longer response time can alter the load shape so that there is less need for fast resources (see comment #2 above).
    - The CAISO should consider adding a description in the methodology of CAISO's criteria for evaluation of the alternatives. The criteria may be different based upon whether the alternative is being used for as an alternative to Transmission or Generation. A new definition and/or process may need to be established for alternatives that are BOTH generation and load (i.e. storage, demand response, etc.).

[4] Section 5.1 of the Alternatives White Paper

- The CAISO should consider adding a step in the methodology to monitor the operational performance of the resources.
- In order to reliably integrate non-conventional resources within our system, operating procedures will have to be developed to clarify how the resources will be called during planned outages as well as and emergency events. Development of these operating procedures may require detailed studies to ensure that the proposed alternatives do not create unintended consequences (e.g., storage acting as a load to the system).

PG&E understands that the CAISO intends for the near term pilot process to be used as a tool to inform the CAISO, CPUC LSEs, regulators and other stakeholders regarding the potential to mitigate identified local reliability issues with non-conventional alternatives. The CAISO states that such analysis could "then inform any CPUC decisions on authorizing procurement of additional preferred resources in those areas and ultimately inform the procurement activities of Southern California Edison and San Diego Gas and Electric[5]." While this assessment of potential is a necessary first step, PG&E recommends that the CAISO also work with the CPUC and LSEs to identify economic incentives for developers to participate in the process. For example, will selected non-conventional resources qualify to count as local RA? Will the CPUC-approved procurement mechanisms for non-conventional resources take into account whether such resources were selected in the CAISO TPP?

Conclusion

Again, PG&E appreciates the CAISO's continuous collaboration with and responsiveness to stakeholders throughout the 2013-2014 TPP, and thanks the CAISO for its consideration of our feedback on the September 25-26 stakeholder meeting and September 18 presentation on non-conventional alternatives to address local needs in the TPP.

[5] p.2 of the Alternatives White Paper