BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.

Rulemaking 12-03-014
(Filed March 22, 2012)

CLEAN COALITON'S COMMENTS ON JOINT LTPP/ENERGY STORAGE WORKSHOP TOPICS

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I. Introduction

In accordance with the Administrative Law Judge's ruling of September 14, 2012, the Clean Coalition provides these comments, on the joint Long Term Procurement Planning (LTPP)/Energy Storage Workshop, held September 7, 2012.

The Clean Coalition is a California-based group that advocates for vigorous expansion of the Wholesale Distributed Generation (WDG) market segment, which is comprised of renewable energy generation that connects to the distribution grid and serves local load. Since penetrations of WDG above about 20% require local balancing of supply and demand of energy, the Clean Coalition not only drives policy innovation that removes the top barriers to WDG (procurement and interconnection), but also drives policy innovations that will allow private capital to deploy Intelligent Grid (IG) solutions like demand response and energy storage. The Clean Coalition is active in proceedings at the California Public Utilities Commission, the Federal Energy Regulatory Commission, and related federal and state agencies throughout the United States. The Clean Coalition also designs and implements WDG and IG programs for local utilities and governments around the country.

II. Responses To Questions Posed

1) What changes should be made to the rules governing the Investor-owned Utilities (IOUs') procurement process that would allow all resources (natural gas combined cycle, combustion turbine, storage, demand response, combined heat and power, renewable, etc.) to compete

fairly in meeting identified needs? Please provide specific proposals for structuring an all-source procurement process.

The Clean Coalition believes that any all-source procurement process should fully reflect the State's preferred loading order, supporting equal consideration of projects within each such procurement category, and fair consideration of the full costs and benefits associated with the technological characteristics and location of each facility. This is in line with D.1201033, which clarifies that the utilities' commitment to procure in line with the loading order is ongoing, even after pre-set targets for preferred resources have been met. In addition, the Commission should consider the cost risk of excess procurement of non-preferred resources that face redundancy within their operational lifetime under projected trajectories of load, emissions and operational costs, transmission congestion and delivery charges, and categorical mandates such as RPS minimums.

The best of all worlds would be an all source RFO that ranked resources based on weighted criteria, including whether the resource is a preferred resource, **its location** and its operational characteristics, when considered in relation to related current and anticipated requirements and facilities. Additional factors for consideration should include the speed at which a resource can be added to the grid, and the ease that it can be sited at needed locations, a.k.a. 'planning flexibility.' The structural risk to the system posed by the project should also be a consideration. For instance, a single large plant being added increases risk to the system compared to several smaller projects which are distributed over a geographic area.

The ability of a resource to employ its location and characteristics to reduce strains on the distribution and transmission system, and so avoid costly upgrades, is a vital factor that requires clear weighting and evaluation. For example, PJM's Reliability Pricing Model (RPM) features locational pricing that reflects the limitations of the transmission system and the differing needs for capacity in different regions.¹

A further change to the procurement process which would improve the ability of all resources to compete would be multi-year resource adequacy contracts. Multi-year contracts would better tie the long term planning process to the availability of resources. While it is not proven that a capacity market is superior to the resource adequacy process, the CPUC should consider increasing the resource adequacy to a three years forward market from a one year market, to ensure that alternative technologies (once they qualify for RA) can be cost effective in

¹ http://www.pjm.com/markets-and-operations/rpm.aspx

their operations. Multi-year contracts would improve the ability of non-generating resources to finance their projects. Although the California's utilities have procured multi-year contracts through RFOs, this is at their discretion and does not provide the incentive for new technologies.

Lastly, is is the position of the Clean Coalition that energy storage should be included in the loading order as a preferred resource, as it provides multiple benefits to the grid beyond peaking capacity, including providing zero emission support to higher use of preferred energy sources and demand flexibility. Storage can be added to the grid in increments, can be built quickly in areas where it is most needed and has ability to respond quickly. Beyond it's operational benefits, storage is an emissions-free way to add local capacity.

The multiple benefits of energy storage are currently being studied in the R.10-12-007 proceeding and a cost-effectiveness model is being developed. Energy storage encompasses a wide range of technologies, scales, and siting opportunities and constraints, each suited to providing a specific set of situation specific services cost effectively. Recognition and coordinated revenue streams for all facilities will allow market optimization to best meet each utility's system requirements. The outcome of the storage proceeding will determine the value that the CPUC places on the additional benefits that storage provides.

2) What amendments, if any, would be necessary to the most recent long-term Request for Offers issued by Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric (SDG&E), and Southern California Edison (SCE) to ensure that all resources are eligible to compete in meeting future Request for Offers (RFO)? Are there any changes specific to meeting Local Capacity Requirements (LCR)?

With regards to the most recent RFOs issued by the utilities, we believe that energy storage and demand response should be added to the lists of technologies able to bid into these RFOs; both are competitive under a variety of circumstances if properly valued. In addition, we would suggest these changes:

- Until all resources can qualify for Resource Adequacy, bidders with non-generating technologies should not be required to apply for Resource Adequacy.
- PG&E should lower the minimum MW of projects that can bid, especially for non-bundled projects located on the distribution grid. The location of these projects, close to load where they can avoid transmission losses and reduce congestion means they punch far above their weight and provide more reliability benefits than larger projects further away.

Resources should be evaluated both on their market and public policy benefits, for
example, contribution to state policy goals such as the Governor's 12000 MW of DG
plan, and/or ability to provide other services such as renewable integration.

3) What specific characteristics or attributes must any resource --including demand-side, energy storage, or distributed -- provide in order to meet future procurement needs? In the absence of a Net Qualifying Capacity, what methodology should be used to determine a proxy capacity value for resources lacking a Net Qualifying Capacity for use in LCR capacity accounting? How can these characteristics or criteria be turned into criteria to evaluate resources bid into a Request for Offers to meet LCR or other needs? How should those criteria be weighted?

The attributes required are entirely related to the specific and often localized procurement needs and there is little reason to limit participation based on universal criteria when an excluded resource may otherwise provide a competitive and complementary subset of those needs. For example, variable resources combined with storage and or DR can provide a broad set of attributes that can not be achieved individually; however, these resources need not be co-located or participating in a joint offer for their combined value to be realized by the grid operator, and as such they should be able to participate as complementary products.

The NQC value of energy storage and demand response should be addressed as soon as possible in the Resource Adequacy proceeding. In the absence of NQC, the proxy capacity value can be a fixed percentage of nameplate, or in the case of demand response, a fixed percentage of possible capacity, to be determined by the CPUC. As long as such resources constitute a limited percentage of the capacity serving an area, approximation of the values is sufficient to meet operational requirements while allowing greater market access and competition.

- 4) What are the pros and cons of the following procurement methods with regard to: 1) local procurement considered in Track 1 of LTPP, and 2) operational flexibility and general system procurement considered in Track 2 of LTPP?
 - A. Continuation of current practices for procurement with minor clarifications

Please refer to the discussion under question 2.

5) At the September 7th workshop, some parties discussed retrofits to existing generation assets as a potential source of incremental capacity. What, if any, changes would need to

be made to the most recent long term RFO issued by PG&E, SDG&E, and SCE to allow for incremental capacity associated with retrofits to existing generation to compete to meet Local Capacity Requirements? Are there any differences in payment streams that should be given for existing capacity, as opposed to upgraded capacity? We defer to other parties on this issue.

6) At the September 7th workshop, both SCE and Enernoc raised concerns that it would be difficult to procure demand response resources that match the online dates (2017 to 2020) and duration (e.g., 20 years) of the conventional generation that is being contemplated as a source of LCR capacity. How could a demand side program be authorized through this LCR procurement process that delivers an on-line date and a duration that is comparable to conventional generation? What additional values are currently attributed to demand response resources in other markets that are currently not accounted for in California, and that might be taken into account as part of an LCR procurement process?

Demand Response is a core resource that has different procurement characteristics than large physical facilities. While long term planning should incorporate very substantial reliance on DR, actual procurement need not extend over such timeframes, as in PJM's RPM. The relevant contract length required is related to the (low) risk of future procurement not being available, and the ability to procure alternate resources at historic pricing to avert market price shocks. The experience of aggregators such as Enernoc in these other markets has shown that this is possible. These shorter contracts may also be more cost-effective, allowing demand response providers to change their offerings according to changes in the market.

Merely allowing demand response resources to compete on equal basis in the market may surprise the utilities to how these resources can conform to their expectations. Or, alternatively, develop a parallel capacity procurement mechanism similar to RAM specifically for demand response resources that features a shorter duration and aspects tailored to the capabilities of demand response. Demand response (and other technologies) can respond quickly to dispatch, in some cases, faster than traditional generation and this aspect should be valued in any solicitation it participates in.

In conclusion, the Clean Coalition believes that there are several issues which need to be addressed before any ideal procurement process can come into being; the lack of NQC values for non-generating resources and clarification of the definitions of 'flexibility' in a procurement sense. Both of these issues will be addressed in the Resource Adequacy proceeding and therefore, that proceeding must issue its new schedule as soon as possible.

Respectfully submitted,

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Dated: October 9, 2012