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)

WOMEN'S ENERGY MATTERS REPLY COMMENTS ON STRAW PROPOSAL

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Women's Energy Matters (WEM) appreciates this opportunity to reply to parties' opening comments on the Energy Division (ED) Straw Proposal on Planning Standards.

ED stated that the Straw Proposal "does not represent final assumptions." Straw, p. vi. A group calling themselves the "Environmental Parties" requested an end-of-June deadline for opening comments in order to review the review the "actual CEC data and assumptions that are proposed in this Straw Proposal" which are not yet available.¹ Their request was denied.

PG&E criticized the Track 2 schedule. PG&E Comments, pp. 1-2.

While the Straw Proposal is officially part of Track 2, the final Planning Standards appear to apply to both tracks of the proceeding.² WEM asks the Commission to further clarify the difference between tracks, explain how the Straw Proposal and June 4 workshop relate to them,³ and whether there will be an opportunity to comment on the actual data used in the final Standards, which are after all "leading to specific supply and demand scenarios for the next 20 years." 5-17-12 Scoping Memo, p. 9.

WEM agrees with many parties that it would be good to spend more time developing the Planning Standards, using data that will soon become available. See, eg. SCE, p. 3-5. Opening comments and workshop discussions revealed many questions that are only beginning to be explored.

No such thing as "technology neutral need for resources"

PG&E stated the Track 2 decision "will further address the physical, <u>technology neutral</u>, <u>system need for resources (*i.e.*, supply or demand-side resources)</u> to meet the reliability and

¹ The final Demand Forecast - to be adopted at CEC's June 13, 2012 busin ess meeting and the Incremental Uncommitted Energy Efficiency report - to be released in late June.

² See, "Staff Roadmap for 2012 LTPP" (Straw, p. vii)

³ The June 4 workshop did not appear on the Scoping Memo's schedule for either track. The invitation stated, "As discussed at the 5/17 workshop, on Monday, June 4th from 10a-4p there will be a workshop in the auditorium on Variability & Renewable Integration studies. The purpose of the workshop is to provide a mostly high level overview of what studies were conducted during 2010 LTPP, what changes have been undertaken since then, and to tee up what assumptions beyond those provided in the ED Straw Proposal on Planning Standards may be needed to facilitate modeling."ED served a 170-page collection of workshop slides, including a "Study Schedule" with this opaque statement: "Schedule for incorporating information into the record will be established in a future ruling." Operating Flexibility Analysis, Slide 6.

flexibility needs of the system..." PG&E, p. 2 (emphasis added). However, there is no such thing as a "technology neutral" need for resources.

Unlike conventional technologies, certain types of renewables and peakreducing demand resources interact with load shapes in ways that significantly affect the amount of need. These go well beyond PG&E's limited list of "attributes,"⁴ which ignores salient characteristics of demand resources, as well as solar. WEM asks CPUC to reject the straitjacket of obsolete thinking where everything has to act like a power plant.

California is far behind many other states on this issue. We are spending over a billion dollars a year on energy efficiency, but all those negawatts are disqualified for use as capacity. What a waste of money. Solar rooftops are also ineligible (although the very same technology is eligible, if it's in a field outside of town).

Solar effortlessly pumps most power into the grid for several hours at midday. Later in the afternoon, efficient air conditioning, white roofs, insulation and/or treeplanting can simply erase the rest of the "peak." All of these technologies can drastically reduce peak load at specific substations where supplies are tight.

They not only *can* do this, they *are* doing it, but the utilities have been refusing to reveal the location of many resources, which are not counted towards capacity. They are currently ineligible to be targeted to address any specific local "need."

Solar shatters old planning paradigms

Slides presented at the June 4 workshop on Operating Flexibility Analysis provided more reasons to support parties' requests for extending the time for ED to produce Hanning Assumptions, and reconsider what should be in the models.

A presentation by E3, *Lessons Learned from CAISO's 2011 Analysis*, confirmed that solar resources are paradigm-shattering — for the reasons WEM described above. E3 re-analyzed information developed in 2010 modeling. Considering only Renewable Portfolio Standard resources (still excluding solar rooftops and Energy Efficiency), E3 slide 35 compared the top 50 hrs. in the "All-Gas" case to the "Environmental" case, and found that *the overall need shrank by 5861 MW*. Eleven power plants! Based on this, California could easily retire the whole fleet of once-through-cooling (OTC) plants.

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⁴ PG&E anticipates the effectiveness3/ of resources to meet system need will depend on their physical and operating attributes, such as start times, minimum operating capacity, ramp rates, and location. The determination should be technology neutral. PG&E Comments, p. 3.

Adding resources wrongly excluded from competing against supplies, such as grid-reliable Energy Efficiency⁵ California could move quickly to retire all OTC plants - nuclear and conventional.)

E3 showed that the need for load following and regulation resources were also minimalized in the Environmental case — dispelling the notion that greater use of renewables requires more and more backup from gas power plants.

Maintaining the myth of "technology neutral resources" deprives California of the enormous cost savings *and greenhouse gas reductions* that would result from better integrating renewables *and* demand resources. Jobs would also be created, because these resources are more service-oriented than capital-intensive.

PG&E pretends to support reduced capacity need, by advocating for shiny new peakers,⁶ but we should not be fooled — this is nothing compared to what's possible with renewables.

Scenarios should consider the procurement-related "attributes" of all resources PG&E stated: "[T]he only metric needed in Track 2 is the effectiveness of different physical and operating attributes of capacity that can meet the identified system need..." PG&E, p. 4. The trick here is that PG&E omits the key characteristics of demand resources in its description of "attributes." On similar grounds, the Commission has long excluded demand resources from fulfilling "need." Using gas resources as a proxy for everything obscures this problem.

In R1005006 and R0802007 as well as this proceeding, WEM has provided evidence of ISO-New England's use of demand resources in capacity markets and the ISO-NE methodology for qualifying them. <u>Utilizing similar metrics, the Commission</u> <u>could easily establish a venue for the preferred resources at the top of the loading order</u> <u>to compete to fill system or local needs.</u> The Commission should immediately correct

⁵ WEM uses the term "grid-reliable energy efficiency" for EE that is measured appropriately for procurement needs and allowed to compete with supplies as energy and capacity resources.

⁶ "For example, with respect to the system need for flexible capacity to integrate renewable resources, resources with short start times, fast ramp rates and low minimum operating capacity are likely to be more effective in meeting incremental needs for flexible capacity. That is, the more effective a resource, the fewer MW that will be needed to meet the same MW of identified need for flexible capacity to integrate renewables." PG&E, p. 3.

this oversight, in view of the huge reductions in need revealed by E3 slide 35, and CPUC's responsibility to ensure "just and reasonable rates."

PG&E's claims that it "supports an overarching goal of reducing greenhouse gas emissions (*e.g.*, energy efficiency, demand response, combined heat and power, etc.) and providing flexible policy choices that allows the selection of the most cost-effective alternatives." PG&E, p. 12. Translation: *smoke & mirrors to prevent the GHG and cost reductions that would result from use of "demand" resources for capacity, combined with more renewables*.

Arbitrary separation of demand from supplies

The separation of "demand" resources from "supplies" is arbitrary and untenable. "Demand" resources are hard to distinguish from supplies. For example:

Most Demand Response (DR) is accounted for on the supply-side via Event-Based programs. ED proposes to use the same non-event DR embedded in the CEC's load forecasts for all scenarios. PG&E Appendix A, p. 4.

It's difficult to use demand resources in planning, *because each variation of the amount of resources on the demand side changes all the supply-side assumptions, which are pegged to demand.* This is one reason why WEM believes the only workable solution is to first extricate all demand resources from the forecast — i.e. unembed them — so that the models can use higher and lower levels of demand resources without throwing everything else off, in the same way as supplies.

This would also make it easier to adjust for more credible levels of attainment for Energy Efficiency programs, which have been notoriously uncertain.⁷

SCE pleads for the Commission to avoid EE and DR in LCRs

SCE recommends that the Commission "not develop the methodologies" discussed in Appendix A, and determine LCR need "without uncommitted EE and DR." SCE, p. 13.⁸ Along those same lines it also recommends only "general geographic locations for

⁷ The lack of credibility of EE goals, and the failure to update realization rates for EE (or codes & standards) may underlie PG&E's unclear objections to using the IncrementalEnergy Efficiency figures, in its comment on Allocation Methodologies. PG&E, p. 14.

⁸ SCE finds it objectionable that ED discusses "the preparation of power flow modeling inputs for incremental energy efficiency program initiatives and a preliminary asses sment of the impacts of such initiatives on local capacity area (LCA) requirements" in Appendix A. SCE, p. 13.

distributed generation" but specific locations for large generators. SCE, p. 8. WEM asks the Commission to order IOUs to identify *all resources* by substation.

The "potential" for peak-saving EE measures has hardly been touched since the 1980s. Little HVAC or insulation has been done. Plenty of potential will exist for many years, contrary to Edison's warning, p. 15.

Clean replacement resources for San Onofre should be determined in this LTPP Edison calls in an "interesting hypothetical" to "evaluate how the grid might operate in the short term, e.g., 2015," without San Onofre (S.O.) but opposes considering anything in this LTPP other than "the contingency that the NRC licenses for SONGS are not renewed." SCE, p. 11. This is nonsense, the height of denial. S.O. has been closed for 4 months and is expected to be closed all summer. It's clearly unreliable. The Commission needs to consider the quickest way to replace this crippled monster with clean resources.

Edison asserts that it cannot "fill the large gap created by the absence of these units in the short run. There is little, if any, large scale generation, and no significant large transmission, that could be implemented by 2015." SCE, p. 11. But in fact the gap is small; CAISO's March 22, 2012 Summer Assessment revealed a need for only about 240MW in LA Basin and 340 MW in San Diego with both S.O. units down. This is a perfect opportunity to consider demand resources as well as DG and small renewables for quick, clean replacement, especially since SCE still had \$600 million EE funds to spend as of the shutdown (Jan. 31, 2012), according to SCE's monthly EE reports.

SCE whines, "The major detrimental effects of a SONGS shutdown are related to transmission planning, grid reliability, and operational issues…" SCE, p. 12. It claims analysis of these must rely on the CAISO 2012-13 Transmission plan in early 2013, but these are all being handled right now since CPUC and IOUs failed up to now to plan for inevitable outages of ancient reactors, much less Edison's disastrous redesign of the steam generators.

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Respectfully Submitted,

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