

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric
Company (U 902 E) for Approval of the
SDG&E Solar Energy Project

08-07-017
(Filed July 11, 2008)

**PROTEST OF
UTILITY CONSUMERS ACTION NETWORK (UCAN)**

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I. INTRODUCTION

Utility Consumers' Action Network (UCAN) hereby protests SDG&E's application for its self-described Solar Energy Project. While UCAN is strongly supportive of PV deployment, as was established in the Sunrise application (A. 06-08-010), UCAN cannot support the overly expensive and unduly megawatt-limited "project" that SDG&E has presented to the Commission in this application. UCAN's protest is based upon the following points:

- SDG&E has failed to show cost-effectiveness of the project.
- SDG&E appears to be avoiding lower-cost rooftop PV potential it has already identified in order to explore the higher-cost world of single-axis tracking PV at a considerable premium for ratepayers
- SDG&E doesn't show that its ratepayers' investment in this particular form of PV deployment will result in any added benefits, e.g. decreased cost of axis tracking PV in the future.
- SDG&E doesn't explain why it selected single-axis tracking over more promising PV deployments or , that it even considered other PV applications.
- SDG&E has sought to limit deployment of PV to unusually small and disaggregated installations, thus losing the benefits of economies of scale.

These issues will be discussed in greater depth below and, presumably, in the evidentiary hearings to be held. Based upon these factors, UCAN urges the Commission to require hearings on this application and broaden the scope of the hearings to explore more cost-effective alternatives.

II. ISSUES DISCUSSED

According to the application submitted by SDG&E, the company will build, own, and operate 50 MWdc or, more accurately, 35 MWac installed over 5 years.¹ SDG&E projects that this program will potentially motivate another 25 MWdc of collocated PV installations that would

¹ Application, p. 3

be built with CSI incentives. With this approximately \$250 million SDG&E is proposing to add 6 MW_{ac} per year when CSI and the CEC New Solar Homes Partnership is projected to add over 218 MW_{ac} of PV by 2016². Thus, SDG&E is seeking over \$250 million to deploy up to 50MW_{dc} as a supplement to the billions allocated paid by the state's ratepayers for the CSI program simply to increase the odds that SDG&E's CSI target will be met.

The cost of the installations is exceedingly high. SDG&E estimates its revenue requirement at an estimated cost of up to \$7,000/MW_{dc}.³ This cost is almost twice the per KW cost that one would reasonably expect with alternative PV deployments. This high cost is attributable to SDG&E basing its revenue requirements on what is apparently a polycrystalline silicon PV single-axis tracking system; this is a system that is arguably the most expensive PV configuration available in the PV market today.

In stark contrast, Southern California Edison Company's (SCE's) Solar PV Program application (A.08-03-015) states that its expected PV cost will be \$3,500/kW_{dc}, and the expected DC to AC conversion is expected to be 0.90 based on use of thin-film PV. This results in an SCE PV cost of less than \$4,000/kW_{ac}. To compound its misstep, SDG&E chooses to use a very conservative DC to AC conversion factor of .67, based on small residential polycrystalline silicon PV with an adjusted AC capital cost of $7,000/kW_{dc}/0.67 = \$10,450/kW_{ac}$. So SDG&E is selecting a PV technology that has an AC-adjusted capital cost more than two-and-a-half times greater than the fixed thin-film PV proposed by SCE.

SDG&E appears to be avoiding lower-cost rooftop thin-film PV deployment in lieu of the higher-cost world of single-axis tracking PV at the ratepayers expense for no other reason than to differentiate itself from the SCE's PV approach. The Commission should require SDG&E to explain why ratepayers should be asked to pay two-and-a-half times more for the system is a 35 percent increase in annual electricity output resulting from the tracking capability. SCE's approach appears on its face to be overwhelming more cost-effective than the SDG&E proposal and SDG&E's application literally ignores this fact.

SDG&E's proposal is also remarkably limited: it is offering to add a very modest amount of MW inexplicably diverging from SCE's far more ambitious objections. No doubt, SDG&E is constrained by its exorbitant cost estimates. But that cost premium is self-inflicted and not a requirement.

In another head-scratching divergence from SCE's more cost-effective approach,

² A. 06-08-010, RT at 4968 (Bialek)

³ Application, p. 8

SDG&E plans to limit its deployment of solar tracking to 1 – 2 MW_{ac} systems proposed at a few locations. In contrast, SCE plans to add 250 to 500 MW of PV in a limited area, the San Bernardino/ Riverside warehouse districts. SDG&E fails to explain why it would disregard the economies of scale being seized by SCE in its deployment.

It is also unclear why SDG&E has chosen to eschew the use of any battery back-up given SCE's position that battery back-up.

Alternatives Considered

As discussed above, SDG&E proposes to bypass the abundant low-cost PV opportunities available to any utility and instead focus on high-cost and relatively scarce opportunities for single-axis tracking. In this application, the Commission should require SDG&E to provide its assessment of the other competing PV applications. As of April 24, 2008, SDG&E's expert conceded in the Sunrise case that the company had not looked at ways in which the company could deploy 210 MW of PV in San Diego County.⁴ This application makes SDG&E's low-level on the PV learning curve painfully apparent.

UCAN submits that, if nothing else, SDG&E's application creates an opportunity for the Commission to build upon the solar deployment facts established in the Sunrise case and further explore alternative PV deployment opportunities in the San Diego region. We expect that the Commission will find that single-axis tracking is an overly expensive and not-particularly-promising means of mass PV deployment. In addition to thin-film being deployed by SCE, the Commission will also likely find that limited battery storage, as described in the San Diego Smart Energy 2020 submitted into evidence in the Sunrise proceeding or concentrated solar can achieve higher levels of output during the peak than tracking PV systems at a much lower cost than \$7000/kW_{dc}.

Limiting project to parking lot installations

SDG&E identifies a total of approximately 115 MW_{dc} in project opportunities in its project. Yet, SDG&E has identified over 1,600 MW of commercial rooftop PV opportunities in the August 2005 inventory of renewable energy resources in San Diego County (www.renewablesg.org). And approximately 3,000 MW of parking lot PV potential was identified in the San Diego Smart Energy 2020 report funded by the San Diego Foundation (October 2007). Yet, in its

⁴ RT at 4967-8 (Bialek)

application, The parking lot shading arrays market segment offers the opportunity for approximately 60 MW_{dc} of solar PV generation subject to further solar insolation analysis which could lower this opportunity. This number contrasts dramatically with the prior two estimates for commercial rooftop opportunities.

Inadequacy of SDG&E's Application

Based upon the discussion above, the ALJ should compel SDG&E to serve supplemental testimony upon the parties of a comparative analysis of SDG&E's proposal with the cost and feasibility of alternative PV deployments. This comparative analysis should look at roof-top thin-film mass deployment, such as that being pursued by SCE, concentrating solar as well as other forms of roof-top deployment and of subsidized customer-owned PV installations. It should also present a cost-benefit analysis comparing its proposal to a comparably funded incentive program for large customers to deploy their own PV.

Without this showing, UCAN expects that the hearings will devolve into a repeat of the Sunrise hearings where the evidentiary record was burdened by a morass of non-comparable baselines that inhibit the Commission's ability to adjudge the relative cost-effectiveness of SDG&E's single-axis tracking bias with the many other alternative PV deployments available to it.

Scheduling

SDG&E has proposed that a schedule be adopted by which concurrent testimony would be due within a month after the prehearing conference. This is inappropriate. In light of intervenor compensation rules which discourage duplicative efforts, it is inappropriate to require DRA and intervenors to file concurrent testimony.

Second, SDGE's proposed schedule affords parties less than two months to retain experts and conduct discovery. This is also inadequate, especially if SDG&E is required to supplement its testimony as recommended by UCAN.

Finally, given that the cost and feasibility of PV deployment has been heavily litigated in SDG&E's Sunrise Powerlink application (D.06-08-010), it would be duplicative of the Commission's resources to relitigate many of the same issues in this proceeding. Thus, UCAN recommends that service of testimony be held until such time that the Commission issues a final decision in A. 06-08-010. Many of the contentious issues in this proceeding may well be resolved by that decision.

Respectfully Submitted,

Dated: August 11, 2008

/s/

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CERTIFICATE OF SERVICE

I hereby certify that I, Laura Impastato, have this day served a copy of the foregoing **PROTEST OF UTILITY CONSUMERS' ACTION NETWORK** on the electronic service list below that includes the applicant and the assigned Commissioner(s) and Administrative Law Judge(s). Dated at San Diego, California, this 11th day of August, 2008.

Signed,

/s/

Laura Impastato

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