STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

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TO PARTIES OF RECORD IN APPLICATION 08-03-015

This is the proposed decision of Administrative Law Judge (ALJ) Maryam Ebke. It will not appear on the Commission's agenda sooner than 30 days from the date it is mailed. The Commission may act then, or it may postpone action until later.

When the Commission acts on the proposed decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the proposed decision as provided in Article 14 of the Commission's Rules of Practice and Procedure (Rules), accessible on the Commission's website at www.cpuc.ca.gov. Pursuant to Rule 14.3, opening comments shall not exceed 15 pages.

Comments must be filed pursuant to Rule 1.13 either electronically or in hard copy. Comments should be served on parties to this proceeding in accordance with Rules 1.9 and 1.10. Electronic and hard copies of comments should be sent to ALJ Ebke at meb@cpuc.ca.gov and the assigned Commissioner. The current service list for this proceeding is available on the Commission's website at www.cpuc.ca.gov.

/s/ MARYAM EBKE for
Karen V. Clopton, Chief
Administrative Law Judge

KVC:gd2

Attachment

Decision **PROPOSED DECISION OF ALJ EBKE** (Mailed 11/20/2012)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Authority to Implement and Recover in Rates the Cost of its Proposed Solar Photovoltaic (PV) Program.	Application 08-03-015 (Filed March 27, 2008)

DECISION DENYING SOUTHERN CALIFORNIA EDISON COMPANY'S PETITION FOR MODIFICATION OF DECISION 12-02-035 (SOLAR PHOTOVOLTAIC PROGRAM)

1. Summary

We deny Southern California Edison Company's (SCE) petition for modification of Decision (D.) 12-02-035 regarding the Solar Photovoltaic Program (SPVP).

The SPVP, adopted in 2009 (D.09-06-049), is a 500 megawatt (MW) solar photovoltaic generation program, with 250 MW owned by the utility and 250 MW owned by independent power producers (IPP). As modified in 2012 (D.12-02-035), the total program remains 500 MW but with no more than 125 MW designated for utility ownership, no more than 125 MW designated for IPP ownership, and 250 MW transferred to the Renewable Auction Mechanism (RAM) program. SCE now petitions to reduce the utility ownership portion by 34 MW (from 125 MW to 91 MW), with the 34 MW transferred to the RAM program. The petition is denied. This proceeding is closed.

2. Background

On June 22, 2009, we adopted a solar photovoltaic program (SPVP) for Southern California Edison Company (SCE). (*See* Decision (D.) 09-06-049 in Application (A.) 08-03-015.) The SPVP is a five-year program to develop 500 megawatts (MW) of direct current (DC) electricity procured from solar photovoltaic (PV) facilities on existing commercial rooftops using plant generally in the size range of one to two MW per project. As originally approved the SPVP was composed of 250 MW of utility-owned generation (UOG) and 250 MW of power purchase agreements (PPA) with independent power producers (IPP).

On December 17, 2010, we adopted the Renewable Auction Mechanism (RAM) as part of the Renewables Portfolio Standard (RPS) program. (*See* D.10-12-048 in Rulemaking (R.) 08-08-009.) RAM is a procurement mechanism for utility purchases from IPPs of alternating current (AC) electricity generated by IPPs using eligible renewable facilities up to 20 MW per project.[1] Our initial implementation of RAM is in a two-year program for the three largest investor-owned utilities (IOUs) to purchase at least 1,000 MW. SCE's portion of the 1,000 MW total is 498.4 MW.

On February 16, 2012, we partially granted an SCE petition for modification of SPVP, with conforming changes to RAM. (*See* D.12-02-035, which modified both D.09-06-049 (SPVP) and D.10-12-048 (RAM).) As modified, the program remains a five year 500 MW program but is adjusted to no more than 125 MW of UOG (with no less than 115 MW without additional

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[1] Eligible renewable facilities are determined by the California Energy Commission (CEC). Eligible facilities include solar PV, wind, biomass, geothermal, and several other

Footnote continued on next page

Commission authorization), no more than 125 MW of IPP ownership (with no less than 115 MW without additional Commission authorization), and with the remaining 250 MW-DC (equivalent to 225 MW-AC) procured through RAM.[2] We directed SCE to file a Tier 2 advice letter no later than 180 days before the end of the five year SPVP if SCE plans to either own less than 115 MW of UOG or procure less than 115 MW from IPPs.

On May 1, 2012, SCE filed Advice Letter 2724-E seeking authorization to reduce the UOG allocation by 15 MW, from 125 MW to 110 MW. On June 13, 2012, the Director of the Energy Division denied the request.

On July 27, 2012, SCE petitioned to modify D.12-02-035. By the August 27, 2012 deadline, three responses were filed: support by the Division of Ratepayer Advocates (DRA), partial support by the Solar Energy Industries Association (SEIA), and opposition by the Clean Coalition. On September 6, 2012, SCE filed a reply.

3. Petition and Responses

We first briefly summarize the petition, parties' responses, and SCE's reply.

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types. (*See* RPS Eligibility Guidebook, Sixth Edition, CEC, Efficiency and Renewable Energy Division, Publication Number: CEC-300-2012-006-CMF; August 2012 at 12.)

[2] The capacity in SPVP is DC, while the capacity in RAM is AC. We use a factor of 0.9 to convert DC to AC, thereby transferring 250 MW-DC (equal to 225 MW-AC) from SPVP to RAM. (D.12-02-035 at 22 (footnote 23).) With the transfer of 225 MW-AC to RAM, SCE's total RAM procurement obligation became 723.4 MW (i.e., 498.4 MW plus 225 MW.) Consistent with our authorization to do so, SCE applied 98 MW from its 2010 Renewable Standard Contract (RSC) Program to its RAM obligation, leaving 625.4 MW for RAM (i.e., 723.4 less 98). (*See* D.10-12-048 at 30; Advice Letter 2785-E dated October 1, 2012.)

SCE petitions for two modifications:

1. SPVP: a reduction of 34 MW-DC in the UOG portion (from 125 MW to 91 MW); and
2. RAM: an increase of 31 MW-AC (by reassigning the 34 MW-DC from SPVP to RAM).

In support, SCE says that when it first proposed SPVP in 2008 the solar PV market was much smaller than it is today and solar PV prices were not competitive with other renewable sources. SCE states that it proposed SPVP with four initial goals: 1) market transformation, 2) improved processes, 3) development of a PV installation workforce, and 4) advancement of PV industry knowledge. (Petition at 9.) SCE asserts that SPVP has accomplished these goals, with the market now transformed and solar PV a competitive technology. Claiming that the UOG portion in particular has been successful, SCE identifies about 25 new UOG solar plant projects totaling approximately 91 MW that are now energized, under construction, or expected to be built.[3]

SCE says, however, that it is now less economic and more difficult to build UOG solar PV projects. For example, SCE claims it is currently possible to purchase generation from solar PV technology at less cost than the cost of UOG. These purchases, according to SCE, are possible through any one of several programs, such as the RSC program, RAM, Renewable Market Adjusting Tariff (Re-MAT), or net energy metering (NEM). Further, SCE reports that its UOG

[3] Of the 91 MW, SCE says 7 MW are ground-mounted (energized) and 84 MW are rooftop (energized, in construction, or expected to be built). Of the 84 MW rooftop facilities, SCE reports 65 MW are energized, 10 MW are under construction (with expected operation in mid-August 2012), and 9 MW appear to be viable. (Petition at 1, 4-5; SCE Reply to Responses at 1.)

SPVP commitments have changed and it is more difficult to build UOG solar PV, largely due to a reduction in the number of viable sites, scheduling issues, and relatively high UOG costs. SCE states it is compelled to inform the Commission that several of its UOG projects are at risk and may not be developed as UOG under SPVP. SCE estimates that reducing the UOG portion of SPVP by 34 MW will save SCE ratepayers about $100 million in capital costs, plus $1.4 million per year in operation and maintenance expenses. SCE concludes that it is in the best interests of SCE's ratepayers for the Commission to quickly reallocate a portion of the UOG component from SPVP to RAM.

DRA agrees, arguing that IOU solar PV projects have price caps that are exorbitantly high and uncompetitive. DRA says SCE is right that it is not in the best interest of ratepayers to continue with the current UOG portion of SPVP. In addition, DRA claims a transfer of 34 MW-DC to RAM will save administrative costs and provide a clearer path for developers regarding contracting opportunities with IOUs.

SEIA partially agrees with SCE, saying SEIA does not object to the reduction in MW allocated to the UOG portion. According to SEIA, however, those MW should not be transferred to RAM but should be transferred to the IPP portion of SPVP, thereby maintaining the SPVP goal of robust competition for rooftop projects near load centers.

Clean Coalition opposes SCE's petition. Clean Coalition contends that SCE's proposed changes fail to support the program's original goals (including development of projects in the one to two MW range, and securing benefits of generation that is close to load). Clean Coalition also asserts that SCE's proposal is not adequately justified by estimated savings. Clean Coalition concludes that the successful SPVP program should not be abandon without good cause.

SCE replies, pointing out the Commission has already rejected shifting SPVP MW from UOG to the IPP portion of SPVP.

4. Discussion

We deny the petition for three reasons. First, continuation of prior circumstances does not justify the proposed small modification, no new or changed conditions warrant additional program changes at this time, and a piecemeal approach to program modification is undesirable. Second, SCE is authorized, but not required, to develop UOG. We expect SCE to fully use the opportunity presented by SPVP to examine reasonable solutions to problems with UOG resource development, if any. Third, a time-tested tool to contain costs and mitigate risk of adverse outcomes is to acquire a diverse portfolio of assets. UOG, as we have stated before, is an important piece of a diverse portfolio of generation resources. We expect SCE, as with all utilities, to reasonably develop all cost-effective UOG as one component of a diverse generation portfolio.

We briefly examine these three reasons.

4.1. Insufficient Change in Conditions

According to SCE, the Commission recognized three changed circumstances which made it appropriate to modify SPVP. SCE says the same circumstances are still present, justifying further modification. (Petition at 10.) We are not convinced.

Our modification of SPVP in 2012 was justified based on reductions in solar PV costs over several years, the lingering economic downturn, and the availability of other programs providing development opportunities for distributed solar PV projects in the size of one to two MW. (D.12-02-035 at 7-9.) While SCE claims that the same conditions continue, we find that even if the

same circumstances continue, these three factors previously supported a large program change (i.e., 250 MW in a 500 MW program). The proposed change here is relatively small (34 MW). We are not persuaded that continuation of the same circumstances justifies a relatively small change today, at a point over half-way through the five year program.

Material changed circumstances might support SCE's proposed modification, but SCE makes no assertion of such change, and we find none. For example, with respect to the three circumstances relied on before, SCE presents no new data that solar PV costs continue to fall and are now materially below the levels upon which we relied in making our February 2012 decision. No other material changed conditions are presented or known. In short, no material changed conditions justify further SPVP modifications.

We are prepared to make reasonable program changes when justified, of course, but we are not inclined to make relatively small changes absent particularly compelling support. Moreover, while circumstances surrounding SPVP can change, each change does not necessarily require another modification. For example, the May 1, 2012 advice letter was predicated upon a reduction of 15 MW in the UOG allocation. Circumstances apparently changed, resulting in the July 27, 2012 petition being predicated upon a reduction of 34 MW in the UOG allocation. As of the date of the petition, SCE notes that 19 MW in the 91 MW UOG portion were not yet energized. Our approval of SCE's petition as filed would potentially necessitate SCE filing yet another petition if some or all of the 19 MW are not energized. This piecemeal approach to modifying the program is undesirable, as explained more below.

4.2. SCE Authorized but not Required

We also deny the petition because SPVP, as modified, does not require SCE to develop 125 MW of UOG. It only requires SCE to apply its best efforts to develop as close to 125 MW as reasonable, but no less than 115 MW without additional Commission authorization. In fact, SCE has other, less burdensome ways to accomplish SPVP goals or seek relief. The petition before us is unnecessary, and a poor use of the time and resources of the utility, parties and the Commission.

4.2.1. What is Required

What we require of SCE is:

> SCE shall develop 125 MW, or as close to 125 MW as reasonable. SCE shall explain in periodic SPVP reports why it is not on target to achieve 125 MW of UOG if that is the case, and explain what steps it is taking to achieve 125 MW. SCE shall, no later than 180 days before the end of the five year SPVP program, file a Tier 2 advice letter for authorization if UOG procurement will be less than 115 MW by the end of year five. (D.12-02-035, Attachment 1 at 2.)

SCE says it files now because it is concerned it might otherwise find itself in a position where it would be too late to comply with Commission orders, and "be unable to build out the entire 125 MW of UOG SPVP prior to the end of the program in June 2014." (Petition at 6.) SCE misstates its obligation. SCE is not required to build out the entire 125 MW of UOG SPVP. Rather, SCE is required to develop as close to 125 MW as reasonable, keep us informed via periodic reports, explain what steps it is taking to achieve 125 MW if it is not on target to do so, and request authority to procure less than 115 MW no later than 180 days from the end of the SPVP.

SCE also explains it files the petition based on the June 13, 2012 letter from the Energy Division Director. SCE asserts that the letter identifies the intent behind D.12-02-035 as requiring SCE to demonstrate a reasonable effort to procure 125 MW of UOG, or explain why SCE would fail to reach this target. SCE says it understands that a request for a reduction below 115 MW is a modification of the Commission's intent and a petition for modification, not an advice letter, is required. To the contrary, our intent with respect to SPVP is for SCE to develop as close to 125 MW as reasonable, keep us informed, and request authority to procure less than 115 MW by an advice letter no less than 180 days before the end of SPVP. A petition for modification is not required for SCE to obtain authorization to procure less than 115 MW of SPVP UOG. The Energy Division Director correctly rejected SCE's May 1, 2012 advice letter as premature, at least until SCE demonstrates a reasonable effort to procure 125 MW of SPVP UOG or has a compelling reason why it simply cannot reach at least 115 MW by the end of SPVP.[4] SCE still has time to demonstrate a reasonable effort. Continuation of prior conditions is not a compelling reason in July 2012 (when SCE filed its petition) why SCE cannot reach at least 115 MW by the end of SPVP (24 months later, as discussed more below). SCE may later file another advice letter. In the meantime, we decline to change either our intent for SPVP or SCE's duties with respect to SPVP.

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[4] "For SCE to seek that reduction now, before it has demonstrated a reasonable effort to procure 125 MW of UOG in its SPVP program, or to explain to the Commission why it would fail to reach that target, is contrary to the intent of D.12-02-035." (June 13, 2012 letter to SCE from Energy Division Director at 2.)

With respect to timing, the advice letter seeking authority for less than 115 MW is not due until 180 days before the end of the five year SPVP. SCE states that SPVP is scheduled to end in June 2014. Thus, the advice letter seeking that authority is not due until December 2013. The Commission considered the amount of time necessary to both build UOG and process a Tier 2 advice letter when it set the deadline of 180 days. SCE will submit periodic progress reports, for example, keeping the Commission informed of status, along with steps SCE is taking to achieve 125 MW. In setting the 180 days, the Commission considered both the knowledge it will have based on those reports along with other reasonable forms of relief available to SCE.

One alternative form of relief, for instance, is for SCE to request more time if SCE needs beyond June 2014 to complete its development of at least 115 MW. SCE may do this in the advice letter (filed 180 days before the end of SPVP). SCE may also request an extension of time to comply with D.12-02-035 by letter or e-mail to the Executive Director. (*See* Rule 16.6 of the Commission's Rules of Practice and Procedure.) A reasonable time extension may allow SCE to accommodate schedule delays or find other cost-effective UOG solar PV projects, for example, at no additional cost (and perhaps cost-reductions) to SPVP.

On the other hand, SCE's periodic SPVP reports will have given the Commission necessary information on status and corrective steps already taken if SCE in fact later determines that the advice letter must seek authority to develop less than 115 MW. The knowledge from these reports will allow reasonably speedy Commission disposition of the advice letter. To the extent more information might be necessary, the 180 days gives staff adequate time to send a data request or engage in other necessary discovery. A petition for modification is not necessary to provide SCE the relief it may need.

4.2.2. Full Five Years

Of equal importance, we adopted SPVP as a creative, innovative program. This is a unique opportunity, and SCE should use the full five years (if not more) to consider, address and resolve problems, if any.

One problem, according to SCE, is that the number of viable projects fluctuates for many reasons.[5] For example, SCE says 18 MW of the 34 MW reduction requested here is composed of ground-mounted projects largely in jeopardy due to excessive interconnection upgrade costs and interconnection construction schedule delays. The remaining 16 MW are rooftop projects which may be unable to meet SPVP time and cost constraints due to four reasons identified by SCE: lack of available buildings which (1) have roofs capable of holding a solar PV system larger than 1 MW, (2) contain structurally sound roofs, (3) are located in an area with sufficient local load but without constrained distribution circuits, and (4) are in a jurisdiction which allows suitable building permits. (Petition at 11.) The dynamic nature of SPVP and the fluctuation in viable projects, SCE says, has resulted in a reduction of 34 MW in SCE's build-out plans.

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[5] SCE identifies the following reasons for fluctuations in the number of viable projects: overloaded or constrained circuits (requiring significant distribution circuit upgrades to accommodate additional generation); building roof conditions (both wind and weight-bearing capability); building structural capabilities (bearing the weight of solar installations); tenant or landlord concerns before granting approval of solar PV construction and installation; inability to agree with tenant or landlord on acceptable lease agreement terms and conditions; inability to obtain suitable solar facility construction building permits; interconnection application problems (requiring unanticipated upgrades at excessive cost and lengthy construction schedules); and costs in excess of cost caps set in D.09-06-049. (Petition at 7-8.)

In the same petition, however, SCE reports that SPVP has met its four stated goals. These include not only market transformation, development of a PV installation workforce and advancing PV industry knowledge but also an improvement in the process for development of solar PV. These reported process improvements involve major advances in business models (e.g., rooftop leases, procurement strategies) and technical innovations (e.g., streamlined interconnections, reduced construction costs, improvements in equipment designs and changes). (Petition at 9.) We expect SCE to use all available time until the end of the SPVP (and more, if appropriate) to make whatever reasonable, cost-effective additional improvements it can.

We also want SCE to continue because SCE reports that the number and availability of SPVP rooftop vendors is fluid, and SCE has not ruled out constructing the ground-mounted facilities as originally planned.[6] A fluid situation wherein projects are not yet ruled-out makes it premature to grant the petition.

Thus, until the end of SPVP year five we want SCE to continue to make reasonable assessments of a variety of UOG solar PV projects, perform due diligence, and actively engage in problem solving. If it needs more time, SCE may request an extension of time to comply with D.12-02-035.

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[6] SCE reports that the 18 MW of ground-mounted solar PV are made up of an 8 MW and a 10 MW facility. The 10 MW plant may require a substantial transformer upgrade at significant cost and time delay. The upgrade is currently the responsibility of an earlier project, however, and may or may not become a cost for the 10 MW SCE UOG plant. (July 2, 2012 SCE Third Annual Compliance Report on the Solar Photovoltaic Program at 9.)

We emphasize that we do not require SCE to take any actions that are unreasonable or uneconomic. SCE may later file an advice letter for authorization of less than 115 MW of UOG but for now should be actively engage in making further reasonable improvements to the UOG portion of SPVP.

4.3. Diverse Portfolio

A time-tested tool to mitigate the risk of adverse outcomes is to acquire a diverse portfolio of assets. Portfolio diversification, for example, is perhaps the most basic risk-management tool used by investors.

Generation portfolio diversification provides utilities with the opportunity to contain costs and manage risk. Utility generation portfolio diversification includes not only diversifying across a range of critical elements (e.g., technologies, fuels, geography) but may also include a reasonable mix of ownership and purchases. We specifically designed SPVP to include equally sized UOG and IPP portions in order to provide us with updated solar PV information regarding "the comparative costs and benefits of each form of renewable ownership." (D.09-06-049 at 4.) That remains an important goal which motivates us to deny SCE's petition.

Moreover, we have said many times that there is an important role for a range of UOG projects in California's hybrid electric industry. (D.12-02-035 at 15.) Just as with IPP plant owned by third parties, UOG offers the potential to provide benefits to ratepayers.[7]

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[7] For example, the revenue requirement for UOG is based on cost of service, which declines as the asset is depreciated. Utility plant, to be eligible for cost recovery from ratepayers, must continually be used and useful, and recovery of utility plant can be reduced or eliminated if the plant is not fully operating or is off-line. (Pub. Util. Code § 455.5.) Utility plant is dedicated to the public interest. The Commission can order

Footnote continued on next page

We also are not convinced by the current savings estimates presented by SCE. SCE does not state or show, for example, that its savings estimates ($100 million in capital costs, and $1.4 million per year in operation and maintenance costs) is net of the cost of procuring the equivalent electricity via RAM.

5. Comments on Proposed Decision

The proposed decision of ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. On _____, 2012, the proposed decision of ALJ Maryam Ebke was filed and served. On _____, 2012, comments were filed by _____. On _____, 2012, reply comments were filed by _____.

6. Assignment of Proceeding

Mark J. Ferron is the assigned Commissioner and Maryam Ebke is the assigned ALJ in this proceeding.

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appropriate modifications to utility plant in the interest of ratepayers. On the other hand, many IPP contracts are at Commission-approved prices that draw from the pool of above market funds (with billions of dollars now contracted at prices above the market price referent). IPP contracts are sometimes subject to reopeners that result in a higher price. Modifications to plant operated by an IPP are dedicated to the benefit of the plant owners, not ratepayers. These and other benefits make UOG an important potential option in the interest of ratepayers. (A.08-03-015, SCE Rebuttal Testimony dated October 3, 2008.)

Findings of Fact

1. The three circumstances that justified the prior modification to SPVP, if they continue at all, do not justify another modification now but, even if they did, do not justify a relatively small change at a point over half-way through the five year SPVP.

2. A piecemeal approach to program modification is undesirable.

3. SCE is authorized but not required to develop 125 MW of SPVP UOG.

4. A petition for modification is not required for SCE to obtain authorization to procure less than 115 MW of SPVP UOG.

5. The advice letter from SCE seeking authority to develop less than 115 MW of SPVP UOG is not due until December 2013 (180 days before the end of SPVP), assuming the five year SPVP will end in June 2014.

6. The Commission considered the amount of time necessary for SCE to build SPVP UOG and process a Tier 2 advice letter when it set the deadline of 180 days.

7. An alternative to a petition for modification is that SCE can request more time to accomplish SPVP UOG goals, if SCE needs time beyond June 2014 to complete at least 115 MW of SPVP UOG.

8. The Commission expects SCE to use at least the full five years of SPVP to consider, address and resolve problems, if any.

9. The number and availability of SPVP rooftop vendors is fluid, and SCE has not ruled out constructing the ground-mounted UOG SPVP facilities.

10. SPVP includes equally sized UOG and IPP portions in order to facilitate data collection on the comparative costs and benefits of each form of ownership.

11. There is an important role for a range of UOG projects in California's hybrid electricity industry.

Conclusions of Law

1. The July 27, 2012 SCE petition for modification of D.12-02-035 should be denied.

2. This order should be effective today so that certainty is provided to SCE with respect to its SPVP UOG efforts.

O R D E R

IT IS ORDERED that:

1. The July 27, 2012 Southern California Edison Company petition for modification of Decision 12-02-035 is denied.

2. Application 08-03-015 is closed.

This order is effective today.

Dated _____, at San Francisco, California.