Decision 16-06-044 June 23, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338-E) 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 GRANTING PETITION FOR MODIFICATION AND TO TERMINATE THE SOLAR PHOTOVOLTAIC PROGRAM

Summary

By this decision, we grant the Petition for Modification (PFM) of Decision 14-06-048 filed by Southern California Edison Company (SCE). Through the PFM, SCE seeks authority to terminate the Solar Photovoltaic Program (SPVP), which was originally instituted to procure 500 megawatts (MW) of electric generation capacity supplied by solar photovoltaic (PV) projects to be installed on existing commercial rooftops in the service territory of SCE. SCE was to own, install, operate and maintain (a) 250 MW of distributed solar PV projects primarily in the 1 to 2 MW range, located within its service territory, and (b) seek competitive bids for power purchase agreements with independent power producers. As explained below, we find that SCE has met its obligations prescribed in the SPVP, and that termination of the SPVP is thus warranted. We accordingly grant SCE's PFM, and terminate the SPVP, as discussed below.

1. Background

On June 22, 2009, the Solar Photovoltaic Program (SPVP) was instituted by Decision (D.) 09-06-049, and modified by subsequent decisions, culminating in

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D.14-06-048. The SPVP was established as a five-year program to develop 500 megawatts (MW) of direct current (DC) electricity resources to be procured from solar photovoltaic (PV) facilities, focusing on projects of 1 to 2 MW in size sited on existing commercial rooftops. The SPVP was intended to encourage development of more distributed renewable resources in the 1 to 2 MW range. SPVP projects could be located near load, thus avoiding the need to build new transmission facilities and help reduce local congestion.

The SPVP procurement target of 500 MW consisted of: (a) 250 MW of utility-owned generation capacity and (b) 250 MW procured through Power Purchase Agreements (PPAs) with Independent Power Producers (IPPs). The IPP agreements were to be selected through annual solicitations over a five-year period. The IPP projects were to fill a gap in the 1 to 2 MW commercial solar rooftop market segment.

The procurement target of 250 MW was initially established, and subsequently reduced to at least 115 MW but not more than 125 MW in D.12-02-035. In D.14-06-048, we again amended the procurement target to constitute at least 125 MW, finding that Southern California Edison Company (SCE) had not yet "made enough of an effort to develop [the 1-2 MW] market segment," after conducting three Request for Offers (RFOs).

As modified in 2012 and again in 2013, the SPVP remained at 500 MW but 91 MW were designated for utility ownership, 125 MW were designated for IPP ownership. The remaining 284 MW were transferred to the Renewable Auction Mechanism (RAM), a procurement mechanism for utility purchases from IPP-owned eligible renewable facilities of up to 20 MW per project.¹ Under RAM, the three largest investor-owned utilities were required to purchase a specified amount of MW. SCE's purchase requirement for RAM was increased as a result of the transfer of MW from SPVP to RAM.

On February 16, 2012, we partially granted SCE's 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).) On June 3, 2013, we granted a portion of an SCE petition to transfer an additional 34 MW from the utility-owned portion of the SPVP to the RAM. (D.13-05-033.) Thus, the current allocation of MW in the program is 91 MW of utility-owned generation under the SPVP, 125 MW of IPP-owned generation under SPVP, and 284 MW under the RAM.

Although SCE conducted five RFO solicitations from 2010 through 2015, SCE's 125 MW procurement target was not met due to a lack of offers received. Accordingly, SCE filed its Petition for Modification (PFM) on January 15, 2016 in accordance with the requirements of D.14-06-048, seeking Commission authority to terminate the SPVP.²

Responses to SCE's PFM were filed on February 16, 2016, by the Office of Ratepayer Advocates (ORA) and by the Solar Energy Industries Association (SEIA). With permission of the assigned Administrative Law Judge (ALJ)

¹ On December 17, 2010, the Renewable Auction Mechanism (RAM) was adopted as part of the Renewables Portfolio Standard (RPS) program. (*See* D.10-12-048 in R.08-08-009.)

² SCE was required to file a PFM if unable to meet its procurement target of 125 MW from IPPs after conducting five RFOs. Since the fifth RFO concluded on September 21, 2015, SCE could not have filed its PFM within one year of the effective date of D.14-06-048. A PFM must be filed within one year of the effective date of the decision proposed to be modified, or justify why the filing occurred beyond one year. (Rule 16.4(d) of the Rules of Practice and Procedure). We consider SCE's explanation satisfactory, and deem the PFM timely filed.

granted by electronic mail on February 18, 2016, SCE filed a reply to the SEIA response on February 26, 2016. SCE also filed a motion on January 15, 2016, for leave to file under seal its Confidential Appendix B to its Petition to Modify. There is no opposition to the motion to file under seal. By this decision, we grant the motion to file Confidential Appendix B under seal. We resolve SCE's PFM based upon review of the above-referenced fillings, as discussed below.

2. Proposal of SCE

Through the filing of its PFM, SCE seeks authority for the termination of the SPVP. In view of its efforts outlined below, SCE claims that it has fulfilled its SPVP solicitation commitments. SCE conducted five RFO solicitations from 2010 through 2015 seeking to procure qualifying capacity resources in accordance with SPVP requirements. Based on the results of these solicitations, SCE believes that all feasible SPVP innovations and price reductions have been achieved. SCE believes that additional breakthroughs in SPVP commercial solar rooftop prices appear unlikely in the near term given the results of its fifth SPVP RFO solicitation. SPVP commercial solar rooftop prices declined on average in the second, third, and fourth RFOs.³

As attested to in the Declaration of John Zoida, attached to the PFM,⁴ SCE conducted significant IPP market outreach during its fifth RFO solicitation. SCE hosted forums for review of prior RFOs and to introduce upcoming RFOs. SCE hosted bidders' conferences to explain the RFO processes. SCE publicly responded to questions from developers through its RFO website and notified its

³ Confidential Appendix B to the SCE Petition to Modify D.14-06-048.

⁴ See Declaration of John Zoida, Energy Contracts/Trading Specialist in the SCE Contract Origination Department, attached to SCE's Petition to Modify D.14-06-048.

distribution list via e-mail, and set forth RFO schedules to allow time for developers to meet the RFO requirements and submit conforming offers.

Despite its efforts, however, the number of bids at cost competitive prices declined significantly in the fifth RFO, resulting in lack of competition in the solicitation. SCE sought to procure at least 27.58 MW in its fifth solicitation to meet its 125 MW target, but received only 11.5 MW of eligible offers. SCE accepted only two proposals, for a total procurement of 1.8 MW. In doing so, SCE sought to protect customers from unreasonably high costs for SPVP projects. Even if every eligible offer had been accepted, SCE still would not have met its procurement target of 125 MW.

In D.14-06-048, the Commission authorized two additional RFO solicitations. After these two additional solicitations were conducted, however, the 1 to 2 MW commercial solar rooftop market segment did not experience additional offer price or valuation improvements beyond those realized in previous RFOs. The price reduction trend appears to have leveled off.

Based on these factors, SCE argues that the SPVP has run its course, and should be terminated. Accordingly, SCE filed its PFM to terminate the SPVP to be relieved of further obligations to continue the program.

As specified in D.14-06-048, SCE was directed to propose one of three follow-up options for Commission consideration if less than 125 MW of solar projects were procured under contract after completing the required number of RFO solicitations. The options identified in D.14-06-048 were:

- 1) terminate the SPVP program,
- 2) move remaining MW capacity into the RAM program (if still conducting solicitations), or
- 3) move remaining MW into the Feed-in Tariff program (i.e., the Renewable Market Adjusting Tariff (ReMAT).

SCE was to provide rationale and justification for the option chosen, and to explain why the options not chosen were infeasible. SCE explains that termination of the SPVP program is the option it proposes, and argues that the other identified options are not suitable solutions.

In D.14-11-042, SCE was directed to hold one additional RAM auction to meet its procurement target of 787.4 MW. Consistent with D.14-11-042 and Advice Letter 3195-E, SCE concluded a sixth and final RAM (RAM 6) solicitation on August 21, 2015. As of December 18, 2015, the date that SCE executed the RAM 6 PPAs and closed the RAM 6 solicitation, SCE had 791.8 MW of active RAM PPAs. SCE, therefore, met the total target for the RAM program. Consequently, SCE argues that it is unreasonable to transfer remaining uncontracted SPVP capacity to RAM as SCE's final RAM solicitation is closed.

SCE explains that solar rooftop developers can make offers into the Preferred Resources Pilot (PRP) and other current and future SCE programs that may be a part of the Distribution Resources Plan (DRP) or the Integration of Distributed Energy Resources (IDER). The PRP program targets serving local energy growth in SCE's Johanna and Santiago substation area exclusively through the use of preferred resources, such as rooftop solar. The DRP will identify grid needs, and the IDER will determine how to source Distributed Energy Resources (DERs) to meet those needs. In the future, solar rooftop developers can make offers into these programs to help meet grid needs.

As explained by SCE, transferring its remaining uncontracted SPVP capacity into the ReMAT would likely increase the quantity of ground-mounted solar PV projects, which can be acquired at more cost competitive prices through the RPS program. Based on the SPVP offers received in the last four SPVP RFOs, these prices would likely be too low to be accepted by developers of commercial

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rooftop solar projects. Therefore, it is unreasonable to transfer SCE's remaining uncontracted SPVP capacity into ReMAT as its pricing and structure are incompatible with the purpose of the SPVP.

3. Position of Other Parties

As noted above, responses to the SCE PFM were filed by ORA and SEIA. ORA recommends that the Commission grant SCE's PFM, and concurs with terminating the SPVP program. ORA believes that SCE sufficiently explains why transferring the associated MWs to RAM and ReMAT are not reasonable, per the requirements in D.14-06-048. ORA believes the Commission provided ample opportunity for the SPVP to succeed by designing a multi-year procurement program and extending and modifying its solicitation rounds. ORA believes that other procurement options for renewable energy – such as RAM – should offer more competitive pricing to the benefit of ratepayer interests.

SEIA opposes the SCE Petition to Modify. SEIA argues that given the recognized need for SCE to procure resources near load (primary objective of the SPVP) and the significant number of MW which remains under the program (approximately 45 MW), the SPVP has not fulfilled its purpose. SEIA thus opposes SCE's request for termination of the SPVP.

SEIA contends that it would be contrary to the state's green energy and resource adequacy goals to remove SCE's obligation to procure the MW authorized under the SPVP. SEIA argues the Commission approved the SPVP as a unique procurement mechanism tailored to provide MW in targeted local areas. SEIA believes there is still a need for such a procurement mechanism to target the needs of local areas in SCE's service territory. SEIA argues that the minimal response to SCE's latest RFOs is not indicative of the market and should not serve as a basis to terminate the program.

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SEIA believes that the time interval between the fourth and fifth RFO solicitations was significantly compressed. SEIA notes that the original SPVP program design of five solicitations over five years was designed to allow for innovations and potential cost reductions to take place. SEIA believes that the timing of the fifth SPVP solicitation drew results which were anomalous, not accurately capturing market interest or accurately reflecting price reductions which can be captured by a competitive solicitation.

SEIA notes that there was no price reduction in the fifth solicitation in comparison to the previous four, but argues this was more likely due to uncertainty regarding an anticipated step down in the federal income tax provision for an "Investment Tax Credit" (ITC) and not the result of plateauing cost reductions. SEIA notes that the ITC was set to step down from 30% to 10% at the end of 2016. On December 15, 2015, the ITC was extended through 2022. If another RFO were to be held in 2016, particularly if developers were given sufficient lead time, SEIA believes the price reductions seen in the first four SPVP RFOs would continue.

Although SEIA agrees with SCE that the MWs should not be transferred to either the RAM or the ReMAT, SEIA still believes that SCE should continue to undertake additional solicitations to meet the procurement targets of the SPVP.

4. Discussion

We conclude that SCE has justified its PFM and request to terminate the SPVP. Accordingly, we modify D.14-06-048, as requested, and grant SCE's request to terminate the SPVP.

We find that SCE has met its obligations to comply with SPVP directives to conduct all of the RFO solicitations that have been ordered, taking into account

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the steps that were taken, as outlined in the previously referenced Declaration of John Zoida.⁵

After two additional SPVP RFOs since the issuance of D.14-06-048, the 1 to 2 MW commercial solar rooftop market segment has not experienced additional offer price or valuation improvements beyond those realized in previous RFOs. Additional near-term breakthroughs in SPVP commercial solar rooftop prices do not appear likely given the results of the fifth SPVP RFO. We conclude that all feasible SPVP innovations and price reductions have already been achieved, and that additional breakthroughs in SPVP commercial solar rooftop prices appear unlikely in the near term.

As noted by ORA, additional SPVP benefits are unlikely given the insignificant number of cost competitive bids in the fifth RFO, indicating that market prices have leveled off. In relation to other renewable procurement programs, SPVP projects are significantly more expensive than other procurement alternatives. Even assuming some price reduction, these projects would not be competitive to other renewable alternatives.

We find insufficient basis for SEIA's claim that additional SPVP program solicitations would lead to greater price reductions in the 1 to 2 MW commercial solar rooftop market. SEIA claims that the lack of time between the fourth and fifth SPVP RFOs reduced developer participation and corresponding price reductions in the 1 to 2 MW commercial solar rooftop market. Yet, SEIA provides no evidence that greater developer participation in future SPVP RFOs would necessarily result in a significant increase in eligible offers. Even if the

⁵ See the Declaration of John Zoida, Energy Contracts/Trading Specialist in the SCE Contract Origination Department, attached to SCE's Petition to Modify D.14-06-048.

number of eligible bids doubled over the number in SPVP 5 in the future, participation in SPVP bidding would likely be minimal.

We also find lack of support for SEIA's claim that uncertainty regarding the extension of the federal ITC demonstrably affected SPVP bid prices. SCE attests that no parties expressed concern regarding alleged uncertainty of the extension of the ITC during the fifth SPVP RFO. We conclude that SCE provided parties with sufficient opportunities to express such concerns through the SPVP 4 Program Forum, SPVP 5 Bidders Conference, and the SPVP 5 RFO website with question-and-answer functionality.

In summary, we conclude that it is reasonable to terminate the SPVP program, and that none of the other options identified in D.14-06-048 offer a feasible or superior alternative to program termination.

We agree with parties that transfer of the existing SPVP capacity requirement to the RAM program is not a suitable alternative. Since the issuance of D.14-06-048, the RAM program has been modified significantly. The 20 MW size limitation has been eliminated and projects are allowed to participate so long as they are in one of the three investor-owned utilities' service territories. Placing the SPVP MWs into a RAM solicitation, considering the pressure to compete on price, will result in large ground-mounted projects, potentially far from load and on the transmission system rather than on the distribution system. Projects will not serve the very purpose which was deemed critical in D.14-06-048.

Transferring MW from the SPVP to the ReMAT (i.e., feed-in tariff) program would also be problematic. While the ReMAT program does target projects 3 MW or less in size, they are not required to be located close to load.

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5. Assignment of Proceeding

Michael Picker is the assigned Commissioner and Maryam Ebke is the assigned ALJ in this proceeding.

6. Comments on Proposed Decision

The proposed decision of ALJ Ebke 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. Comments were filed by SCE, ORA, and SEIA on June 9, 2016, and reply comments were filed by SCE on June 14, 2016.

We have taken these filed comments into account in finalizing the proposed decision, as discussed below.

SEIA filed comments arguing that the proposed decision fails to address the need for local generation in SCE's service territory, as previously noted in the SEIA response to SCE's Petition. By being able to locate projects near load, the need to build new transmission facilities is thus avoided, also helping to reduce local congestion. SEIA claims that the proposed decision errs in this regard, and is inconsistent with past Commission acknowledgement of the nexus between the SPVP and fulfillment of local generation needs. SEIA argues that the importance of this objective has become more pronounced given the moratorium on operation of the Aliso Canyon storage facility. If minimal to no gas can be withdrawn from Aliso Canyon during the coming summer months, SEIA notes there is significant risk of gas curtailments.

SEIA argues that by relieving SCE of the obligation to procure additional MW of capacity via the SPVP, the proposed decision errs. In view of the need for electric resources that can be rapidly deployed in the Los Angeles Basin, and consistent with SPVP objectives, SEIA argues that the proposed decision should

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deny SCE's Petition, and direct SCE to immediately conduct a further SPVP solicitation.

We find no basis to continue the SPVP obligation based on SEIA's comments. SEIA attempts to link the benefits offered by solar projects located near load with continuation of the SPVP. In doing so, however, SEIA presupposes that SPVP continuation would result in cost-effective bids. Yet SEIA identifies no error in the proposed decision's conclusion that additional breakthroughs in SPVP commercial solar rooftop prices appear unlikely.

Moreover, as noted in SCE reply comments, termination of the SPVP will not preclude solar PV projects being built near load. Moreover, the SPVP is not the most appropriate program to procure power from solar PV projects located near load. SCE is pursuing other solar PV project contracting opportunities. In late 2015, SCE secured long-term contracts for two solar PV rooftop projects to be constructed within the Western Los Angeles Basin through its Preferred Resources Pilot Distributed Generation Request for Offers (PRP DG RFO). SCE is currently soliciting energy from solar PV installations through its PRP RFO #2. SCE is an also participating in the IDERs Proceedings (R.14-10-003). This includes leading the Competitive Solicitation Framework Group tasked with creating a framework for soliciting DERs, inclusive of solar PV, for future grid needs. The solicitations will be aimed at solving distribution system needs, inherently requiring DERs to be sited near customer load.

As noted by SCE, continuing the SPVP is not the most effective way to address the issues associated with temporary closure of Aliso Canyon. SEIA has not established linkage between terminating the SPVP and reliability concerns relating to the closure of Aliso Canyon. SCE notes that Variable Energy

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Resources, like solar PV, cannot address summer season reliability concerns, and they are not the best choice for addressing winter reliability concerns.

Findings of Fact

1. The SPVP was initially designed to be a five-year program to develop 500 MW of DC electricity resources to be procured from solar PV facilities.

2. The SPVP targeted primarily 1 to 2 MW rooftop solar installations in the SCE service area. This is different from the type of project eligible under RAM, which may be between 3 and 20 MW in size.

3. Although the Solar PV originally contemplated five separate solicitations being conducted over a period of five years, after completing the required competitive solicitations, SCE procured less than 25 percent of the MW allocated to the IPP portion of SPVP.

4. SCE sought to procure at least 27.58 MW in its fifth solicitation in order to meet its 125 MW target under the SPVP, but received only 11.5 MW of eligible offers. To avoid incurring unreasonably high costs, however, SCE accepted only two of the proposals received, for a total procurement of 1.8 MW.

5. Although SCE conducted two additional solicitations in its SPVP after the adoption of D.14-06-048 and before the end of 2015, SCE still has less than 125 MW of SPVP capacity under contract to IPPs.

6. Additional breakthroughs in commercial solar rooftop prices appear unlikely in the near term given the results of its fifth Solar PV solicitation. Program innovations and price reductions have already been achieved.

7. In relation to other renewable procurement programs, SPVP projects are significantly more expensive than other potential procurement alternatives.

8. By filing its Petition to Modify D.14-06-048, SCE sought Commission authority to terminate the SPVP program.

9. In D.14-06-048, SCE was directed to propose one of following options for Commission consideration, if less than 125 MW of solar projects were procured under contract after completing the required competitive solicitations:
(1) terminate the SPVP entirely, (2) transfer the remaining capacity up to 125 MW uncontracted into the RAM program, or (3) transfer the remaining capacity up to

10. In its Petition for Modification, SCE justified why termination of the SPVP is reasonable and why the other potential alternative options identified in

D.14-06-048 are not appropriate solutions.

125 MW uncontracted into the Feed-in Tariff program.

11. It is inappropriate to transfer the remaining SPVP MW to the RAM program because SCE's RAM program is complete and is terminating.

12. It is inappropriate to transfer the remaining SPVP MW to SCE's ReMAT Program (*i.e.* Feed-in Tariff Program).

13. The pricing and structure of the ReMAT Program is incompatible with the purpose of the SPVP.

Conclusions of Law

1. SCE's PFM of D.14-06-048 should be considered timely filed even though tendered more than one year after the effective date of D.14-06-048. Given the timing of its fifth solicitation to meet its 125 MW target, SCE could not have filed its PFM within one year following issuance of D.14-06-048.

2. SCE's PFM of D.14-06-048 should be granted and the SPVP should be terminated.

3. SCE has satisfied its obligations to complete the SPVP solicitations mandated by D.14-06-048.

4. The motion of SCE to file Confidential Exhibit B under seal should be granted for two years. During that period the information should not be made

accessible or disclosed to anyone other than the Commission staff except on the further order or ruling of the Commission, the assigned Commissioner, the assigned ALJ, or the ALJ then designated as Law and Motion Judge. If SCE believes that further protection of the information kept under seal is needed, it should file a motion no later than one month before the expiration date stating the justification for further withholding of the information from public inspection, or for such other relief as the Commission rules may then provide.

ORDER

IT IS ORDERED that:

1. The Petition to Modify Decision 14-06-048, filed by Southern California Edison Company is granted.

2. Decision 14-06-048 is hereby modified to incorporate the changes shown in Appendix 1 to this decision.

3. The motion of Southern California Edison Company to file under seal Confidential Exhibit B attached to its Petition to Modify Decision 14-06-048 is granted. This information must remain sealed for a period of two years after the effective date of this order. After two years, all such information will be made public. If Southern California Edison Company believes that further protection of the information kept under seal is needed beyond two years, it may file a motion stating the justification for further withholding of the information from public inspection, or for such other relief as the Commission rules may then provide. This motion must be filed no later than 30 days before the expiration of the two-year period granted by this order.

4. Application 08-03-015 is closed.

This order is effective today.

Dated June 23, 2016, at San Francisco, California.

MICHAEL PICKER President MICHEL PETER FLORIO CATHERINE J.K. SANDOVAL CARLA J. PETERMAN LIANE M. RANDOLPH Commissioners

Appendix 1

Adopted Modifications to Specified Conclusions of Law and Ordering Paragraphs in Decision 14-06-048

The modifications to the specified Conclusions of Law previously set forth in Decision (D.) 14-06-048, as identified by numerical sequence below, are hereby adopted, as shown by strike-through of deletions and underline of additions. The new Ordering Paragraph to D.14-06-048 as shown below is also hereby adopted.

Conclusions of Law (as originally numbered in D.14-06-048)

4. <u>The SPVP should be terminated</u>. SCE's authority, granted in D.12-02-035, to develop less than 115 MW <u>of solar PV in SPVP</u>, or to seek other relief such as extending the deadline for procurement of IPP MW, by Tier 2 Advice Letter 180 days before the end of SPVP, should be rescinded. <u>SCE has no further obligation to procure up to 115 MWs of solar PV from any other program to meet its Renewable Portfolio Standard procurement obligations.</u>

7. <u>Since SCE didoes not successfully contract for 125 MW of IPP SPVP</u> projects after two more solicitations (RFO 4 and RFO 5, if needed), SCE should be required to <u>appropriately</u> filed a petition to modify this decision explaining the rationale for its preferred next steps and the following three options:
1) terminating the program entirely, 2) transferring the remaining MW to reach 125 MW total into the RAM program, or 3) transferring the remaining MW to reach 125 MW into the Feed in Tariff program. <u>SCE provided a reasonable explanation as to why it is appropriate to terminate the SPVP instead of using</u>

these other options. SCE should also explain why it has not chosen the other options or has suggested an additional one.

8. If SCE chooses to file a petition to modify this decision to move remaining MW up to 125 MW into the Feed in Tariff program, SCE should file a simultaneous petition to modify D.12-05-035 or the appropriate decision in R.11-05-005.

New Ordering Paragraph

8. The Solar Photovoltaic Program is hereby terminated entirely.

(End of Appendix 1)