

Decision 08-01-030 January 31, 2008

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.

Rulemaking 06-03-004
(Filed March 2, 2006)

OPINION MODIFYING DECISION 06-08-028 REGARDING INDEPENDENT PERFORMANCE MONITORING AND REPORTING REQUIREMENTS

1. Summary

We modify the performance monitoring and reporting requirements in our decision implementing the California Solar Initiative (CSI), Decision (D.) 06-08-028, to remove the “independence” requirement. Prior to this order, entities affiliated with a CSI incentive recipient, solar installers, or solar manufacturers were precluded from providing the Performance Monitoring and Reporting Service (PMRS) required under the CSI. This decision replaces this criterion with a protocol-based approach to ensure the integrity of the data provided to the Program Administrators for purposes of paying Performance-Based Incentives (PBI). For systems receiving incentives under the Expected Performance Based Buydown (EPBB) structure, we will continue to require that all systems include PMRS, subject to the cost caps adopted in D.07-07-028 and as modified in D.07-07-028. However, PMRS providers serving EPBB customers will not be subject to either the protocol-based approach identified herein, or the independence requirement as adopted in D.06-08-028.

The Energy Division is directed to convene a workshop to finalize the protocols for PMRS, as discussed in this order. Once the protocols are finalized through the advice letter process, the Program Administrators shall conform the CSI Handbook to these changes.

2. Background of Performance Monitoring and Reporting Requirements

In D.06-08-028, the Commission required that all solar installations receiving incentives through CSI have some form of communication reporting capability. This communication and reporting requirement has come to be known as “performance monitoring and reporting service” or PMRS. The decision discusses the need for performance feedback to customers so they can maximize the value of their solar investments. (D.06-08-028, p. 76.) The decision also discusses that systems receiving PBI must have reporting capabilities as part of their incentive payment mechanism. (*Id.*, p. 77.) Moreover, the Commission required that performance data collection and reporting should be the responsibility of an independent entity not affiliated with the incentive recipient, or any solar system manufacturer or installer. (*Id.*, p. 79.)

The Commission recognized that many details relating to PMRS would need further development and it directed the metering subgroup of the parties developing the CSI Handbook to address these areas. In particular, the Commission requested the metering subgroup to propose minimum PMRS standards and requirements within an overall cost constraint where the cost of such systems plus meter costs is no more than 1% of the total installed cost for systems up to 30 kilowatts (kW) or less, and no more than 0.5% of the total installed cost for larger systems. (*Id.*, p. 77.)

3. Petition to Modify Metering and Monitoring Requirements

On March 5, 2007, the Joint Solar Parties,¹ Pacific Gas and Electric Company (PG&E), San Diego Regional Energy Office (now known as the California Center for Sustainable Energy (CCSE)), and SMA America (hereinafter, collectively, the “Petitioners”) filed a petition for modification of D.06-08-028 seeking changes to meter accuracy requirements and elimination of the requirement for independent performance monitoring. In D.07-07-028, the Commission addressed the meter accuracy portion of the petition and eliminated the cost cap for customers that receive PBI. In today’s decision, we address the remaining portion of the petition regarding independent performance monitoring.

The Petitioners request that the Commission no longer require that solar system performance monitoring and reporting under the CSI program be provided by an independent entity, unaffiliated with solar manufacturers or installers. They argue the current independence requirement severely limits competition because there are only three PMRS vendors. Furthermore, they contend that it is unclear if these vendors qualify as unaffiliated with incentive recipients, solar manufacturers or installers. They note that the current PMRS vendors may rely on solar vendors, installers, and integrators to sell their products and services, calling into question their independence.

The Petitioners argue that the Commission should allow any PMRS vendor listed with the California Energy Commission (CEC), including those affiliated with solar manufacturers and vendors, installers, and integrators, to provide

¹ The Joint Solar Parties are PV Now (now known as the Solar Alliance), California Solar Energy Industries Association, and the Vote Solar Initiative.

PMRS services. They claim the quality of data monitored and reported by non-independent PMRS providers can be verified through the CSI program's Measurement and Evaluation process. They also argue that the independence requirement is limiting choice for PMRS providers, and as a result is keeping PMRS costs artificially high. Thus, they claim the independence requirement does not adequately protect solar customers.

Responses to the petition were filed jointly by Fat Spaniel Technologies (FST) and Energy Recommerce Inc. (Energy Recommerce),² Southern California Edison Company (SCE), the Consumer Federation of California (CFC), KACO Solar Inc. (KACO), and PVI Solutions, Inc.

PVI Solutions, Inc. and KACO support the proposed modification, claiming it will allow greater competition among PMRS providers and innovation through integration of PMRS with solar installations. They concur with Petitioners that random sampling of PMRS providers should ensure the provision of quality data.

CFC, SCE, and FST/Energy Recommerce oppose the proposed modification, claiming that Petitioners have not adequately supported why the independence requirement should be relaxed, and that relaxing independence to achieve more PMRS providers will reduce consumer protection and increase costs.

² The FST/Energy Recommerce response was also supported by: Bridgeover, Inc., Connected Energy Corp., Draker Solar Design, LLC, DRI Energy Inc., Heliotronics, Inc., Independent Energy Solutions, Inc., Old Country Roofing, Solar Wave Energy, Inc., Solectria Renewables LLC, and Southern California Solar dba Solar Electric Systems.

Specifically, FST/Energy Recommerce contend that the integrity of performance data is of utmost importance. They argue that performance-based solar incentives, which pay solar customers based on production, create an incentive for system owners to report artificially high production data to receive larger PBI payments. In addition, inverter manufacturers, PV panel manufacturers and solar installers have a significant incentive to overstate system efficiency. For this reason, FST/Energy Recommerce claim that an independent PMRS requirement preserves the integrity of program data at the lowest possible cost. FST/Energy Recommerce urge the Commission to take extra precautions to ensure that financial incentives correspond to the energy actually produced.

Further, they claim that independent monitoring and reporting is becoming the standard for renewable energy credit (REC) trading. These parties argue that if the Commission were to eliminate the independence requirement, this could undermine confidence in the value of California solar RECs. Finally, FST/Energy Recommerce argue the Commission does not need to relax the independence requirement because there is no shortage of entities interested in providing PMRS services. They claim seven independent entities are interested in being PMRS providers, rather than the three entities suggested by Petitioners.

In response, Petitioners reiterate that the independence criterion unintentionally restricts market entry and limits innovation and customer choice in PMRS. They also note that innovative technological approaches for PMRS are allowed under the CEC's New Solar Home Partnership. They claim that certification standards for PMRS providers and CSI program measurement and evaluation can better ensure accuracy in system performance. Regarding REC requirements, Petitioners comment that since the REC program is voluntary, CSI

incentive recipients should not be required to meet an independent PMRS requirement that may or may not be required for a future REC program.

4. Performance Data Provider (PDP) Proposal and Comments

On September 4, 2007, the Administrative Law Judge (ALJ) issued a ruling requesting further comments from parties on the petition for modification of the metering independence requirement. The ruling noted that since the petition for modification was filed, the metering subgroup of the CSI Handbook development process had continued to discuss PMRS requirements. Energy Division staff who monitors the work of the metering subgroup informed the ALJ of a proposal for replacing the independence requirements in D.06-08-028 with a detailed set of instructions for how to qualify as a third party PDP who provides data from PBI customer meters to CSI Program Administrators. The concept behind the PDP proposal is the creation of detailed standards and protocols for collecting and reporting solar production data from solar system owners to CSI Program Administrators for purposes of calculating performance incentive payments. These PDP standards and protocols would replace the current requirement that only independent entities not affiliated with solar manufacturers or installers can provide PMRS.

The ruling asked parties a set of questions about the PDP proposal, which was attached to the ruling. The ruling asked parties whether it was appropriate to remove the independence requirements previously adopted and instead apply a qualification process for PDPs. The ruling also asked whether the PDP qualification process should apply solely to the transmission of solar data to a Program Administrator for purposes of a PBI payment, or whether it should also apply to PMRS for reporting to customers on their system data.

The following parties provided comments on the PDP proposal: CCSE, Enphase Energy Inc. (Enphase, formerly PVI Solutions), FST/Energy Recommence, KACO, PG&E, SCE, and jointly by the Solar Alliance, California Solar Energy Industries Association (CALSEIA), and Recurrent Energy, Inc. (collectively the Joint Solar Parties II).

Several commentors, namely PG&E, the Joint Solar Parties II, Enphase, KACO, support removal of the independence requirement and replacement with the PDP qualification process. They contend an independence requirement is unnecessary given the PDP proposal, which provides a superior model for data integrity. Moreover, they maintain that qualification of PDPs will allow the PMRS market to develop on its own by allowing customers to choose their PMRS provider from a larger pool of qualified entities. PG&E notes the PDP proposal is firmly based on Commission-approved rules for meter data management within the Direct Access program and is superior to the Commission's independence requirement which failed to define "affiliation" with sufficient specificity in the PMRS and solar metering context.

CCSE supports the PDP proposal, but only for data to Program Administrators for PBI payment purposes. CCSE maintains the PDP proposal is not intended to replace independence requirements for PMRS providers who supply system data to system owners. In that regard, CCSE suggests a three-fold approach to ensure accuracy and integrity of solar system performance data involving random inspections of metering systems, random audits of PMRS data, and verification of a sample of sites through the CSI measurement and evaluation process.

FST/Energy Recommence and SCE oppose the PDP proposal. FST/Energy Recommence maintain the PDP proposal is not an adequate substitute for an

independence requirement because it allows monitoring by parties with an inherent bias toward the results. They contend the surest way to maintain data quality and integrity and avoid vendor self-interest and inflated claims for PBI payments is through independent PMRS services, not provided by solar owners, installers, manufacturers or integrators who are inherently biased. They allege PMRS should be independently “provided,” even if it is sold bundled with a solar system.

FST/Energy Recommerce claim the PDP proposal is incomplete and unclear in numerous areas such as validation rules, audit procedures, data format, non-performance safeguards, and appeal procedures. They express concern that the PDP qualification process allows Program Administrators the power to assess PMRS providers’ qualifications without an appropriate appeals process.

SCE alleges the PDP proposal does not provide sufficient detail on topics such as information technology, audits and penalties, and it ignores the utilities’ Advanced Meter Infrastructure (AMI) rollouts. In lieu of the PDP proposal, SCE contends the Commission should delegate PMRS for PBI payment purposes to the Program Administrator to either perform themselves or contract with an entity for the services. Further, SCE suggests the Commission require all solar installations that receive CSI incentives to install an additional meter socket so that the Program Administrator can determine the best meter for that customer’s needs. The Commission should adopt minimum PMRS standards and require the meter to provide a display of basic performance information. PG&E, the Joint Solar Parties II, and FST/Energy Recommerce oppose SCE’s proposal, contending the idea will increase program administration costs and allow SCE to

monopolize the meter data management market. These parties see no reason to allow SCE to mandate a utility specific approach.

5. Discussion

Petitioners raise a valid argument that the independence requirement in D.06-08-028 is unnecessarily restrictive and has the potential to limit competition among PMRS providers. The Commission has previously stated that one of its key goals in the CSI program is market transformation to make solar products cost-effective. (D.06-01-024, p. 4.) We agree with Petitioners that the independence requirement could restrict innovation in solar metering and monitoring services and potentially raise solar costs. If we remove the independence requirement and open the PMRS market to a larger pool of providers, while ensuring accurate data, this supports our goal of lowering solar costs. We are also persuaded that the definition of “affiliated entities” in D.06-08-028 could have been more specific. Even if we had clearly defined what type of affiliation would render an entity ineligible to perform the PMRS function, we did not specify how this would be enforced. The decision did not specifically state whether the independence requirement applied only to data supplied to Program Administrators for PBI payment purposes, or also to data to system owners to monitor system performance.

Upon further review and after obtaining comments on the PDP proposal, we now find that accuracy and data integrity can be ensured through alternative means, namely a PDP qualification process similar to the one on which parties commented, as well as through verification and auditing of a sampling of

metered data through the CSI measurement and evaluation process.³ While we agree with several commenting parties that accurate data regarding solar system performance is critical to correct calculation and payment of PBI and meaningful program evaluation, we do not agree with FST/Energy ReCommerce that independence is the only way to ensure accurate data. As Enphase points out, we do not require independent water, electricity, or gas meters, but instead rely on equipment certification to ensure accurate, verifiable, and trustworthy meter data. Rigorous standards for metering and monitoring, such as a PDP qualification process, are required for accurate data, not independence. Moreover, FST/Energy ReCommerce argue that independence is required for REC trading purposes, but our Energy Division staff advises us that the Western Renewable Energy Generation Information System (WREGIS), the system developed to track RECs for purposes of assessing compliance with California's Renewables Portfolio Standard (RPS), has a meter accuracy requirement, but not an independence requirement.

We agree with the Joint Solar Parties II that PDP standards and protocols can ensure certification, data verification, enforcement, and data quality. As the Joint Solar Parties II point out, many solar companies are publicly listed companies that operate under the United States Securities and Exchange Commission and Sarbanes-Oxley reporting rules. As such, they have an incentive to provide accurate reporting of production data so as not to jeopardize their brand image by biased reporting.

³ The Commission intends to address CSI measurement and evaluation in a subsequent phase of this proceeding.

Further, we reject SCE's proposal that the Commission delegate responsibility for PMRS for PBI payment purposes to the CSI Program Administrators. We will not delegate PMRS for PBI payment purposes to the Program Administrators because we prefer to let individual solar customers determine the PMRS approach they prefer, choosing from competitive PMRS providers who meet the PDP guidelines and protocols.

Although we are willing to relax the independence requirement in favor of a PDP qualification process, we are concerned that the PDP proposal circulated for comment needs further refinement before it can be applied to the CSI program. In particular, we agree with FST/Energy ReCommerce that the PDP proposal needs further development on specific issue areas and input from affected companies. Given that the PDP proposal covers a wide variety of data requirements, such as data format, security and confidentiality, validation, and retention, we have concerns that without adequate input from the companies that might potentially become PDPs, the data requirements may be unduly burdensome. We also have concerns with aspects of the PDP proposal relating to technical and customer support, performance exemptions, and the appeal process. Therefore, we direct Energy Division staff to convene a workshop within 45 days of this order to discuss improvements and refinements to the PDP qualification process. Specifically, the workshop should address the following aspects of PDP qualifications, standards, and protocols

- Data format, reporting and retention
- Data security and confidentiality
- Data and payment validation
- Measurement and evaluation
- Technical and customer support

- PDP performance exemptions
- PDP non-performance and appeal process

Following the workshop, Energy Division shall file a workshop report with recommendations for changes to the PDP proposal, and serve the report on the service list of this proceeding. The workshop report will direct one of the utilities to file an advice letter, on behalf of the CSI Program Administrators, which addresses Energy Division's recommendations and contains a revised PDP qualification process, and PDP standards and protocols. This advice letter should be filed within 30 days of the workshop report, unless modified by ALJ ruling. The PDP qualification process, standards, and protocols shall be effective upon Energy Division's approval of the advice letter.

Next, we find it necessary to clear up any confusion created from the general discussion of PMRS in D.06-08-028. In considering the petition, we realize that we may have been too general in D.06-08-028 in our discussion of the need for independent PMRS. We now find it appropriate to establish differing requirements for the provision of PMRS based on the recipient and use of the PMRS information. The recipient and use of the PMRS information differ based on whether the system owner is receiving PBI or EPBB incentives. Thus, we will delineate the PMRS requirements based on whether the PMRS provider is providing information *to the Program Administrator* to calculate incentive payments under PBI, or *to the EPBB customer* solely to monitor system output for the customer's information.

For systems participating under the PBI, we will replace the independence requirement in D.06-08-028 with a protocol-based approach consistent with the PDP qualification process and guidelines, once finalized through the advice letter process described above. Given that ratepayer monies are involved and the

incentive payout is tied directly to system output, data integrity is absolutely essential. Thus, all systems that receive CSI incentives through PBI payments will be required to take service from a PMRS provider that meets the requirements under the PDP qualification process. The Program Administrators will determine the incentives to be awarded to systems receiving PBI on the basis of this information.⁴ If PBI customers meet these PDP requirements, and all other program rules as set forth in the CSI Handbook, they should receive their PBI payments without delay.

In the interim, until the Commission takes action on the advice letter to be filed on behalf of the Program Administrators as described above, systems owners seeking incentives under the PBI are required to take PMRS from providers that, at a minimum, adhere to the interim protocols identified in the PDP proposal on which parties commented. These interim protocols are attached to this order as Appendix A. Once the PDP qualification process, standards, and protocols have been finalized and approved by Energy Division, all PMRS providers serving systems receiving incentives under the PBI will be required to meet these finalized protocols.

For systems participating under the EPBB, while we retain our requirement that systems take service from PMRS provider, subject to the cost caps identified in D.06-08-028 and as modified in D.07-07-028, we will no longer require that PMRS providers meet the independence requirements set forth in D.06-08-028, nor will we require these providers to meet the PDP requirements identified in this order. While we continue to believe that system owners should

⁴ This is a minimum requirement. Nothing in this order precludes recipients of PBI from taking additional PMRS from a provider that does not meet these requirements.

have access to accurate data in order to monitor their system's performance, we do not believe the same level of stringency is required. We take this position because, under the EPBB, the amount of ratepayer incentives provided does not depend on metered system performance, but is estimated and paid in advance. The Commission will likely conduct its own audit and program evaluation of EPBB incentives after it considers CSI program evaluation requirements in a later portion of this proceeding. System owners who receive EPBB incentives can decide for themselves if they want to retain the services of a PMRS provider that adheres to more exacting standards (e.g., is "independent," or that meets the PDP requirements adopted herein for PBI systems).⁵ Performance monitoring remains an important tool for the consumer to monitor actual system output and, by extension, the impact that the system is having in reducing electricity bills.

Furthermore, D.06-08-028, as modified by D.07-07-028, requires that systems receiving incentives under the EPBB subscribe to PMRS provided the costs of these services do not exceed 1% of system costs for systems up to 30 kW, and .5% of system costs for systems greater than 30 kW. To the extent that stringent data handling requirements result in higher PMRS costs, we see little practical value in imposing these requirements on EPBB systems if, as seems

⁵ System owners may wish to take service from a PMRS provider that adheres to more stringent requirements for a variety of reasons, including the issue of RECs. To the extent that the performance monitoring and reporting requirements are more stringent under WREGIS than what is adopted here, system owners may wish to opt for a PMRS provider that adheres to a more exacting standard in order to preserve the option to sell RECs if and when California authorizes unbundled RECs to be used for compliance purposes under the RPS program.

likely, such a requirement results in the cost cap being reached and exemption from the PMRS requirement.

The changes articulated in this decision will apply to all systems participating in the CSI program. As of the effective date of this order, all EPBB systems, existing and new, will be allowed to receive PMRS from a provider of their choosing, irrespective of that entity's affiliation with the incentive recipient, solar manufacturers, or solar installers, so long as the provider is listed on the CEC eligible PMRS provider list.⁶ As of the effective date of this order, all systems receiving or seeking incentives under the PBI will be required to take PMRS from a provider that meets the interim protocols identified in Appendix A of this order for the data stream to the Program Administrator for purposes of PBI payments, until finalized protocols are adopted by Energy Division through the advice letter process.

Finally, we find it necessary to clear up any confusion that may exist on the role of the Metering Subcommittee. In FST/Energy Recommerce's comments on the PDP proposal, they expressed concern regarding the governance of the CSI Metering Subcommittee. FST/Energy Recommerce contend that in D.06-08-028, "the Commission had given the Metering Subcommittee the tasks of developing standards and specifications for meter performance and communication." They express surprise in learning that the Metering Subcommittee "is an advisory body only and has no official responsibilities for CSI program implementation."

⁶ EPBB systems are still required to choose a PMRS provider subject to the cost caps adopted in D.06-08-028, as modified in D.07-07-028.

In response to this comment, we clarify that in D.06-08-028, the Commission stated that parties were free to organize a metering and data communication committee to *propose* metering standards, protocols, and data reporting requirements as part of the CSI Program Handbook development process. (D.06-08-028, p. 81.) The Commission did not create the Metering Subcommittee or give it any official role in CSI implementation, although it did suggest metering topics that such a subcommittee might want to provide input on as the Commission finalized the CSI handbook. A Metering Subcommittee was formed as part of the Handbook process, and it has contributed input to the Commission in developing the CSI Handbook.

While we welcome the input of parties and outside metering experts in development of standards for metering performance and communication, the Metering Subcommittee has no official role in CSI program implementation. All CSI metering requirements will be established either through Commission orders such as this one, or through the CSI Handbook, as appropriate. According to the process established in D.06-08-028, the initial CSI Handbook was approved by an Assigned Commissioner's Ruling in December 2006, and changes to it are now considered through an advice letter process. Through the advice letter process, all interested parties have an opportunity to comment on potential changes to the CSI Handbook. Similarly, any metering requirements set forth in a Commission order may only be changed by a subsequent Commission order, following an opportunity for comment by all interested parties.

6. Comments on Proposed Decision

The proposed decision of Commissioner Peevey in this matter was mailed to the parties in accordance with Pub. Util. Code § 311 and Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed by CCSE,

Enphase, FST/Energy Recommerce, the Joint Solar Parties, PG&E, and SCE. Reply comments were filed by FST/Energy Recommerce, the Joint Solar Parties, and SCE.

Several parties ask for more time than the decision allows to develop and refine the PDP protocols in a workshop process. We make no adjustments to the decision because it already provides flexibility for the ALJ to amend the schedule for PDP development through the workshop process, if needed.

Another frequent comment was that Appendix A to the decision with interim PDP data transfer rules does not adequately reflect the process the program administrators are currently using. PG&E and CCSE provide a suggested revised appendix with their actual process, and FST/Energy Recommerce provide further edits to the appendix. SCE urges that we not adopt any interim PDP rules until after a workshop. We have modified Appendix A to reflect the modifications noted by the parties. We decline the suggestion to allow the program administrators flexibility to modify the interim PDP rules. The parties should instead use their time to refine final PDP protocols and rules through the workshop process, thereby lessening the time the interim rules are in effect. We will use the workshop for discussion of final PDP rules, and not further modification of these interim ones. However, we will allow the program administrators to propose minor, non-substantive revisions to the contact information or data submission timing in these interim rules. This change has been incorporated into the decision.

FST/Energy Recommerce comment that D.07-07-028 ordered the CSI program administrators to retain a consultant to conduct a metering, monitoring and reporting market assessment to inform future decisions on metering accuracy, monitoring and reporting, and system eligibility. The Joint Solar

Parties respond that this report was intended to provide clarity about meter costs and levels of accuracy, and is not aimed at informing the issue of whether PMRS providers should be independent. We agree with the Joint Solar Parties that we do not need the results of the study commissioned in D.07-07-028 to modify our prior order and remove the independence requirement in this order.

Other minor modifications to the order suggested by parties in their comments have been incorporated throughout the decision.

7. Assignment of Proceeding

President Michael R. Peevey is the assigned Commissioner and Dorothy J. Duda is the assigned ALJ for this portion of this proceeding.

Findings of Fact

1. In D.06-08-028, the Commission required that all solar installations receiving incentives through the CSI must have some form of communication reporting, or PMRS.
2. D.06-08-028 required that the PMRS provider be an “independent” entity, i.e., unaffiliated with the incentive recipient, or any solar manufacturer or installer.
3. CSI incentives provided under the PBI structure are paid based on actual system output, whereas incentives paid under the EPBB structure are based on estimated system performance.
4. The performance of systems installed with either PBI or EPBB incentives will be reviewed as part of the program evaluation component of the overall CSI program, which the Commission will establish at a later date.
5. A key goal of the CSI program is market transformation to make solar products cost-effective.

6. By prohibiting solar manufactures and installers from offering PMRS, the independence requirement in D.06-08-028 limits competition for the provision of these services, and may restrict innovation and increase costs of PMRS.

7. The definition of “affiliated entities” in D.06-08-028 was unclear.

8. The Commission does not require that metering of water, electricity or gas service be provided by an independent entity.

9. WREGIS has a meter accuracy requirement, but not a meter independence requirement.

10. A qualification process for PDPs, along with PDP protocols and standards, can ensure accuracy and integrity of solar performance data.

11. The PDP proposal filed in this proceeding needs further development on technical and customer support, performance exemptions, the appeal process, and other issues.

Conclusions of Law

1. D.06-08-028 should be modified to eliminate the requirement that PMRS providers be independent or unaffiliated with program participants, solar manufacturers or solar installers.

2. Opening the PMRS market to a larger pool of providers supports the Commission’s goal of lowering solar costs and transforming the solar market.

3. It is reasonable to eliminate the independence requirement for the provision of PMRS as established in D.06-08-028 for PBI program participants and replace it with a PDP qualification process, standards, and protocols.

4. We should establish differing PMRS requirements depending on whether the PMRS information goes to the Program Administrator to calculate PBI payments, or to the EPBB customer solely to monitor system output.

5. All systems that receive CSI incentives through PBI payments should be required to take service from a PMRS provider for the data stream to the Program Administrator that serves as the basis for PBI payments, that meets the PDP qualifications, standards, and protocols, to be established following an Energy Division workshop and subsequent advice letter process.
6. Until PDP standards and protocols are reviewed and established through an Energy Division workshop and advice letter process, solar system owners seeking PBI payments should subscribe to PMRS from providers that meet the interim protocols in Appendix A of this order.
7. Energy Division may approve minor, non-substantive changes to the contact information or data submission timing in these interim protocols, with revisions circulated to the service list.
8. All systems that receive CSI incentives through an EPBB payment shall take PMRS service, subject to the cost caps in D.06-08-028, as modified by D.07-07-028, but the PMRS provider does not need to be independent or meet the PDP qualifications, as long as the PMRS provider is listed on the CEC eligible PMRS provider list.
9. The changes in this decision should apply to all systems participating in the CSI program.
10. CSI program applicants who meet the PDP requirements set forth in this order, and all other program rules as set forth in the CSI Handbook, should receive their incentive payments without delay.
11. Conforming changes should be made to the California Solar Handbook.

O R D E R

IT IS ORDERED that:

1. The March 5, 2007 petition for modification filed by the Joint Solar Parties, Pacific Gas and Electric Company (PG&E), the San Diego Regional Energy Office (SDREO), and SMA America is granted as it pertains to independent performance monitoring and reporting as set forth in this decision.
2. Decision (D.) 06-08-028 is modified as follows to remove the requirement that performance data collection and reporting shall be provided by an independent entity (deleted text in strikethrough):

~~Delete Ordering Paragraph 17: Program administrators shall ensure the entity responsible for performance monitoring and reporting is not affiliated with the incentive recipient, or any solar manufacturer or installer.~~

~~Delete Conclusion of Law 43: The entity administering solar performance reporting should be an independent party, either existing administrators or a third party not affiliated with solar manufacturers, installers or owners.~~

3. Effective with this order, systems receiving performance-based incentives (PBI) through the California Solar Initiative (CSI), are required to subscribe to performance monitoring and reporting service (PMRS) for the data stream to the Program Administrator from a provider that meets the performance data provider (PDP) requirements set forth in Appendix A of this order, until the Commission adopts final PDP requirements by advice letter, in compliance with this order. The program administrators may request, in writing, that Energy Division approve minor, non-substantive revisions to the contact information or data submission timing in these interim rules. Any such requests shall be copied to the service list of this proceeding. Energy Division will notify the program administrator if the change is allowed and direct the administrator to provide an updated copy of the interim PDP protocols to the service list.

4. Effective with this order, systems receiving the Expected Performance Based Buydown incentives through CSI are required to subscribe to PMRS, as described in this order, without an independence or PDP requirement.

5. Within 45 days of this order, Energy Division shall convene a workshop to discuss improvements and refinements to the proposal for PDP qualification, standards, and protocols. Following the workshop, Energy Division shall file a workshop report with recommendations for changes to the PDP proposal and shall direct either PG&E, Southern California Edison Company (SCE), or San Diego Gas & Electric Company (SDG&E) to file, within 30 days of the workshop report, an advice letter on behalf of the CSI Program Administrators with a revised PDP qualification process, standards and protocols and conforming CSI Handbook changes. The assigned Administrative Law Judge has the authority to modify this schedule and Energy Division may refine the workshop agenda, as set forth in this decision.

6. Following Energy Division action on the advice letter described above, systems receiving CSI incentives shall comply with the PMRS requirements established by Energy Division through the advice letter process in order to receive their incentive payment.

7. PG&E, SCE, and SDG&E and its Program Administrator, the California Center for Sustainable Energy, shall cooperate in implementing these changes.

8. The changes adopted herein will apply to all systems participating or seeking incentives under the CSI program.

9. This proceeding shall remain open to address additional issues identified in the scoping memo.

This order is effective today.

Dated January 31, 2008, at San Francisco, California.

MICHAEL R. PEEVEY

President

DIAN M. GRUENEICH

JOHN A. BOHN

RACHELLE B. CHONG

TIMOTHY ALAN SIMON

Commissioners

APPENDIX A

INTERIM CSI PBI DATA TRANSFER RULES

Interim Criterion for Submitting Production Data

- The Performance Data Provider (PDP) must be an eligible PMRS provider listed on the CEC's website:
(<http://www.consumerenergycenter.org/erprebate/monitors+rsp.html>)
- The PDP must receive authorization from the Program Administrator prior to submitting Performance Based Incentive (PBI) Data Reports for customer incentive payments.
- The customer is responsible for contracting with an approved PDP. The PDP will provide actual production data from the customer-owned generation to the Program Administrator for determining monthly PBI payments. Any delay in delivery of the data report to the Program Administrator may result in the incentive payment being delayed.
- The Program Administrator will not pay incentives based on estimated data supplied by the PDP, nor will the Program Administrator estimate incentive payments in the absence of actual performance data.
- The PDP must submit performance data using the attached CSI PBI Data Report Worksheet.

Program Administrator Data Submission Requirements and Instructions for Completing the Spreadsheet:

PG&E Monthly PBI Data Submission

The PDP must provide monthly system performance data to PG&E in the approved PBI Data Report Excel spreadsheet format. The spreadsheet should be e-mailed to SolarPBI@pge.com per the established reporting cycle each month. PG&E will validate the resulting PBI payment to ensure it is within an expected range before the payment is issued.

The PDP is responsible for immediately notifying PG&E if it is unable to provide the data for any reason. PG&E will only issue PBI payments based on actual performance data.

CCSE Monthly PBI Data Submission

The PDP is responsible for providing monthly system performance data to CCSE via CCSE's approved Excel PBI Data Report spreadsheet via e-mail per the PA established payment cycle. CCSE has set up two distinct e-mail addresses for the separate Payment Cycles:

- pbi1@energycenter.org for Cycle 1
 - 12:00AM on the 1st of the month through the 12:00AM on the 1st of the following month
- pbi2@energycenter.org for Cycle 2
 - 12:00AM on the 16th of the month through the 12:00AM on the 16th of the following month

CCSE has specific personnel managing each Payment Cycle and any issues with a specific project or payment can be addressed by the CCSE PBI Payment Team. Should a PDP be unable to transmit a data report due to communication issues, CCSE will pay out during the following cycle (double pay) contingent upon receipt of the missing data.

The PDP is responsible for immediately notifying CCSE of any issues they are/will have with transmitting the PBI Data Report. CCSE will only pay incentives on actual performance data.

SCE Monthly PBI Data Submission

A customer's PBI report period begins on midnight of the 1st or 15th day of the month, whichever is earliest, following the date of the incentive claim approval letter. For example, if the date on the incentive claim approval letter is June 7, 2007, the start date of the new PBI data reporting period will be midnight, June 15, 2007. If the date on the final approval letter is June 23, 2007, the start date would be midnight, July 1, 2007. The PBI data reporting period will be on the date described above and will end on the same date and time of the following month. For the first example, the PBI reporting period would begin on midnight, June 15, 2007 and end on midnight, July 15, 2007.

SCE contact information:

Website: www.sce.com/rebatesandsavings/CaliforniaSolarInitiative/

E-mail Address: csi@sce.com

Contact Person: *Program Manager, California Solar Initiative Program*

Telephone: (800) 799-4177

Fax: (626) 633-3402

Mailing Address:

Southern California Edison

6042A Irwindale Avenue

Irwindale, CA 91702

Interim CSI Data Reporting Worksheet Instructions

During this interim period, the PDP must provide all PBI data reports via e-mail to the respective Program Administrator. The appropriate Program Administrator contact information is listed at the end of these instructions. A response e-mail will be sent by the Program Administrator to confirm receipt of the PBI data report.

A PBI data report must be received by the appropriate Program Administrator for a project no later than close of business (COB) five days following the end of the reporting period. This equates to COB the fifth or twentieth of each month depending on the customer's PBI reporting period. As per Section 4.4.5.2 of the CSI Handbook, the Program Administrator has 30 days from the end of the PBI data report period to provide payment.

The yellow fields in the CSI PBI Data Reporting Worksheet require input by the PDP as described below:

A) **Project Info** – this section identifies all the project details for the Program Administrator to confirm which project and month to which production data and payment

will be assigned. It also includes the contact information of the PDP in the event the Program Administrator identifies a problem with the PBI data report.

i. **Data Report Number** – this is the effective report number out of the scheduled 60 payments.

ii. **Primary/Secondary Incentive Level** – for projects that are approved to receive incentives from two incentive levels OR projects that are prorated due to size or project cost restrictions, the splits established by the Program Administrator and reported on the incentive claim approval letter will be entered here.

B) **Production Report** – this section contains all the pertinent reporting information for the PBI reporting period.

i. **Meter Blocks** – The blocks numbered from one to four represent the fields available for each meter of the specified project. Most projects will only fill out the first block corresponding to a single performance meter onsite. If the specified Project ID has more than one performance meter associated with it, use the additional blocks as needed. Please contact your Program Administrator if more than four blocks are needed.

ii. **Utility and Meter Information** – Input the utility account number that corresponds to the approved PBI meter. Input the utility assigned PBI meter number. If no utility PBI meter number was provided, input the meter's serial number and preface the serial number with an "SN". For example, SN013257.

iii. **Start/End Read Cumulative kWh** – These numbers represent the cumulative count of the total kWh production of the generation system. This is NOT the 15-min kWh production read. The End Read of each PBI data report should be the same as the Start Read of the following period.

iv. **Optional 15-minute Data Report** – the second tab on the spreadsheet is available for PDPs to provide the full log of 15-min interval kWh production data to the Program Administrator if possible. The Program Administrator will require PDPs to submit all historical 15-minute interval data that was not reported during the interim PBI payment process period using the EDI 867 protocol. Therefore, PDPs are strongly encouraged to provide this data during the interim period.

1. **15-minute kWh Read** – this data must be actual production including any meter multipliers. Do not provide raw data that has been processed without applicable meter multipliers.

2. **Timestamp** – each 15-minute read must also be accompanied by a corresponding date and timestamp, each in separate columns adjacent to the data read. The date stamp should be in the DD/MM/YYYY format and the timestamp is to be in the 24 hour format HH:MM:SS.

(END OF APPENDIX A)