

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

RESOLUTION E-4205
November 6, 2008

R E S O L U T I O N

Resolution E-4205. Southern California Edison (SCE), on behalf of all California Solar Initiative (CSI) Program Administrators, including the California Center for Sustainable Energy (CCSE), propose a set of revisions to the CSI Program Handbook conforming to the Final Performance Data Provider (PDP) Protocol.

SCE Advice Letter 2258-E and 2265-E (filed on July 30, 2008 and August 14, 2008) and Protest to Advice Letter 2258-E (filed August 18, 2008), and SCE Response to Protest (filed August 26, 2008).

This resolution approves, with modifications, the final performance data provider protocols proposed by Southern California Edison, on behalf of the California Solar Initiative Program Administrators, in Advice Letter 2258-E and 2265-E.

SUMMARY

AL 2258-E: CSI Program Handbook Revisions Introducing a Final Performance Data Provider (PDP) Protocol.

The purpose of these proposed California Solar Initiative (CSI) Program Handbook modifications is to outline the required process and qualifications to be approved as a Performance Data Provider (PDP) for the CSI incentive program. Under the program, a PDP reports energy production from an installed solar system in order for the solar customer to receive a stream of incentive payments under the Performance Based Incentive (PBI) portion of the CSI program. The proposed changes also detail the data reporting requirements (format, delivery method) and schedule for Performance Based Incentive data reports. The PDP requirement is mutually exclusive of the requirements identified in the CSI Handbook for the Performance Monitoring and Reporting Services (PMRS). However, the PMRS provider may provide both PMRS and PDP services. All PDPs must meet the requirements established herein in addition to the requirements set forth in the CSI Program Handbook.

On July 30, 2008, SCE, on behalf of the CSI Program Administrators (PAs), filed AL 2258-E, which proposed a final PDP protocol to govern monitoring and reporting of solar system performance data that serves as the basis for performance based incentive

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(PBI) payments. The PDP protocols proposed in AL 2258-E would replace the interim PDP protocols currently in Appendix H of the CSI Program Handbook.

AL 2265-E: Modification of proposed CSI Program Handbook Revisions Introducing a Final Performance Data Provider (PDP) Protocol to add a bond requirement

On August 14, 2008, SCE, on behalf of the CSI PAs, submitted AL 2265-E. The purpose of this AL was to modify the previously submitted final PDP Protocols in order to add a bond requirement for PDP providers.

- SCE's proposed revisions conform with Commission decisions and Sections 25405.5 and 25405.6, and Chapter 8.8 to Division 15 of the Public Resources Code, and Sections 387.5 and 2851 of the Public Utilities Code.
- SCE's proposed changes, while not directly related to either Commission decisions or California State Law, are in the spirit of the goals of the CSI Program and further the goal of achieving 3,000 MW of installed distributed generation solar by 2016.
- Comments to this Resolution shall be returned to the Commission no later than 5 p.m. Pacific Standard Time on October 26th, 2008, with Reply Comments being submitted no later than October 31st, 2008, by 5 p.m. Pacific Standard Time. This Resolution will be on the next regularly scheduled meeting date after comments, likely to be November 6, 2008.

BACKGROUND

On September 4, 2007, Administrative Law Judge (ALJ) Duda issued an ALJ Ruling Requesting Comments On Petition For Modification Of Metering Independence Requirements (2007 Ruling). The 2007 Ruling requested comments on a Joint Petition for Modification of D.06-08-028 Regarding California Solar Initiative Metering Requirements (PFM), which sought elimination of the metering independence requirements. Specifically, the Ruling solicited comments from interested parties on removal of the requirements for independent metering and performance monitoring adopted in D.06-08-028 in favor of explicit instructions for qualifying as a performance data provider of CSI meter information to CSI PAs. The concept of introducing performance data providers into the CSI came out of the metering, reporting and monitoring requirements of the Direct Access Program. The goal of introducing performance data providers into the CSI Program, and creating specific requirements to qualify as a provider of these services, was to help safeguard ratepayer funded incentive payments.

On January 31, 2008, the Commission issued D.08-01-030 modifying the CSI performance monitoring and reporting rules to remove the independence requirement and mandate that all performance monitoring services be unaffiliated with all CSI incentive recipients, solar installers, or solar manufacturers. This decision replaced the independence requirement with the PDP protocol for data validation. In addition, the Commission ordered the Energy Division (ED) to convene public workshops to discuss possible improvements and refinements to the requirements in the PDP protocol proposal that was attached to the 2007 Ruling. This decision also ordered the CSI PAs to file an Advice Letter with a PDP protocol within 30 of the filing of a workshop report by ED staff. In February and May 2008, the ED facilitated a total of three workshops, which were well attended by the CSI PAs and interested parties. The focus of the workshops was to address and reach consensus on the seven PDP issue areas listed in D.08-01-030. The seven specific issue areas addressed at the workshops included:

1. Data format, reporting and retention.
2. Data security and confidentiality.
3. Data and payment validation.
4. Measurement and evaluation.
5. Technical and customer support.
6. PDP performance exemptions.
7. PDP non-performance and appeal process.

On July 1, 2008, ED filed a workshop report that contained a PDP protocol proposal that reflected a consensus position on each of the PDP protocol issue areas. The ED workshop report noted that for the issue of data and payment validation the PAs should address data validation requirements and take into consideration concerns raised by PMRS providers when making any associated advice letter filing. In response, the PAs and interested parties continued to discuss the data validation and transfer requirements and reached agreement on improvements relating to this PDP issue. Consistent with the 2008 Ruling and the ED workshop report, the CSI PAs submitted AL 2258-E on July 30, 2008, and subsequently filed 2265-E on August 14, 2008.

On August 18, 2008, the PMRS Providers filed a protest of AL 2258-E. In their protest, the PMRS Providers requested that the CSI PAs consider modifying the following elements of the PDP Protocols:

- The date requirement for EDI 867 compliance
- Penalties for failing data transfer test
- PDP reimbursement of PA or Customer
- Proof of sufficient bond or insurance coverage
- Recognition of proposed PDP Protocols modifications made as part of March 17, 2008 post-workshop comments

On August 26, 2008, SCE filed a response to the protest of the PMRS Providers. In this response, SCE proposed modifications to AL 2258-E and AL2265-E that directly addressed the concerns raised by the PMRS Providers in their protest.

SUMMARY OF ADVICE LETTER FILINGS

Summary of AL 2258 – E

Utility customers participating in the CSI program are required to install performance meters to determine the actual output of their generation equipment. For customers enrolled under the CSI PBI program, data from these meters will be used to calculate their monthly incentive payment. This data may be read and communicated to the PA by a PDP. Customers may also elect to contract this service through their local utility company. This document provides information and instructions for non-utility providers wishing to qualify to provide PDP services.

The following are the PDP's primary responsibilities:

- Manage meter reading/ data retrieval schedule
- Read and retrieve performance meter data
- Post data on appropriate Program Administrator server on a consistent and reliable schedule, per individual Program Administrator requirements.
- Validate performance data prior to providing to the PA using the approved validation rules outlined in this document
- Calculate monthly production of solar generating system for incentive payment
- Format data using EDI 867 or other approved protocol
- Troubleshoot and resolve communications issues
- Store data in accordance with program requirements
- Make historical performance data available to Program Administrators as requested
- Provide technical support to Program Administrators as well as customer support
- Communicate meter/device changes to the Program Administrator
- Provide disaster recovery and data backup services as requested by respective Program Administrator
- Manage data on PDP server
- Ensure confidentiality of customer information and performance data
- Possess technical expertise and capability
- Comply with all State and Federal laws

Summary of AL 2265-E

After the conclusion of the ED-facilitated workshops, the PAs continued to discuss additional ways to refine and improve the PDP Protocols. As a result of these additional discussions, the PAs recommended an addition to the PDP Protocols to add a bond requirement that reflects the current market practices of participants in the CSI program. A bond requirement is a common practice that allows PDPs to remain in compliance with all applicable provisions governing the CSI Program and PDP Protocols.

The bond requirement is necessary in the event that an end-use customer suffers damages as a result of the PDP's actions. A bond will provide a source of compensation for those damages. The PAs recommended that the Commission add a bond requirement to the final PDP Protocols submitted in Advice 2258-E, as shown in Attachment A, and conform the CSI Handbook as necessary.

PROTESTS

Advice Letter 2058-E was protested by CSS-Technologies, Draker Laboratories (fka Draker Solar Design, LLC), Energy Recommerce, Inc., Fat Spaniel Technologies, Inc., Glu Networks, natcon7, PowerNab, and Pyramid Solar (jointly, hereafter, the PMRS Providers) on August 18, 2008.

In their protest, they outlined five issues and questions for the CSI PAs to answer relating to the PDP Protocols.

1. The date requirement for EDI 867 compliance

In the PDP Protocols filed as part of AL 2258-E and AL 2265-E, no specific date was given for when PDP providers would have to begin compliance with EDI 876 data transfers regulations. In their protest, the PMRS Providers requested that the CSI PAs amend the PDP Protocols to include a 6 month implementation period for the PDP Protocols, at the end of which all PDPs must be in the process of "active EDI 867 implementation testing".

2. Penalties for failing data transfer test.

In the PDP Protocols filed as part of AL 2258-E and AL 2265-E, there is a regulation that any PDP provider that fails their data transfer test three times will have their PDP eligibility revoked for 6 months. In their protest, the PDP Providers argue that there may be valid reasons why a given provider may fail their transfer test three times. So, instead of revoking their eligibility, the penalty should be that the PDP provider is forced to pay the CSI PA for any additional transfer tests.

3. PDP reimbursement of PA or Customer

In the PDP Protocols filed as part of AL 2258-E and AL 2265-E, it states if an audit shows a discrepancy between the PDP reported data and data obtained by the Program Administrator for a specific customer that is greater than 5%, the PDP will be responsible for reimbursing the customer or Program Administrator for any such difference if it is determined that the

difference is due to PDP error. In their protest, the PDP Providers request that any financial penalties be removed, and in their place the addition of mandatory audits for PDPs who mis-report data and a revocation of eligibility for a PDP provider who has mis-reported more than three times.

4. Proof of sufficient bond or insurance coverage

In the PDP Protocols filed as part of AL 2258-E, it states that PDP providers must provide a proof of sufficient bond or insurance coverage. The PDP Providers protest requests that the CSI PAs include a specific amount of insurance coverage or bond amount. In AL 2265-E, which modifies the PDP Protocols, the CSI PAs clarify that the bond requirement should be set at twenty thousand dollars.

5. Recognition of proposed PDP Protocols modifications made as part of March 17, 2008 post-workshop comments

On March 17, 2008, a group of PMRS providers filed joint post-workshop comments. In their comments, they requested minor changes to the then draft PDP Protocols to reflect modifications that had been discussed at the workshop. The issues covered were deadlines for resolving data transfer testing problems, PDP non-performance, and criteria for PDP appeals.

PROTEST RESPONSE

Summary of SCE's August 26, 2008 Response to Protest

On August 26, 2008, the CSI PAs submitted a response to the protest of the PMRS Providers. In this response, the CSI PAs directly addressed each of the concerns raised by the PMRS Providers. This response also included specific proposals to modify the PDP Protocols that were submitted as part of AL 2258-E and AL 2265-E. An outline of each of these proposals is below.

1. Advice 2258-E Should be Modified to Specify that the EDI 867 Requirement be Effective 6 Months from the AL Effective Date

In its Protest, the PMRS Providers noted that a date certain is necessary to implement the EDI 867 requirement, in order to enable proper business planning for prospective PDPs, as well as to minimize confusion, increased costs, and bottlenecks during the EDI 867 testing phase.

The PAs acknowledge the PMRS Providers' concerns and agree that a date certain is appropriate. As such, the PAs suggested that they will file a supplemental advice letter to modify the CSI Program Handbook to specify that (i) the EDI 867 Requirement will not become effective until six (6) months from the effective date of that supplemental advice letter filing; and (ii) testing requirements will commence after that effective date. Additionally, as the program develops and more information becomes available, the PAs reserve the right to revisit this issue, as necessary.

2. Advice 2258-E Should be Modified to Delete the Requirement that PDP Applicants Cease Business Activities Following an Unsuccessful Third Integration Test

In its Protest, the PMRS Providers assert that, with regard to penalties for failing Data Transfer Testing, parties agreed to a replacement mechanism in the form of a cash payment/penalty due to the PAs for each test conducted subsequent to the third test. However, while the parties agreed to the concept of such a replacement mechanism, no agreement was ever reached on the appropriate cost of the payment/penalty structure, as the PMRS Providers point out in their petition. Additionally, the PAs overlooked the comments of the PMRS Providers provided in Attachment B of the June 25, 2008, Energy Division (ED) workshop report and included the penalty provision for PDP failure of Data Transfer Testing in Advice 2258-E.

While the PAs are willing to continue negotiating with the PMRS Providers on the specifics of a replacement penalty mechanism, the PAs will propose, in the supplemental advice letter filing to Advice 2258-E, a mechanism that simply prohibits a PDP applicant from adding any additional customers until such PDP applicant passes Data Transfer Testing. Such a mechanism would obviate any problem of stranded PBI customers. Additionally, as the program develops and more information becomes available, the PAs reserve the right to revisit this issue, as necessary.

3. Advice 2258-E Should be Amended to Delete the Financial Penalties Associated with Audit/Investigation Discrepancies Between the PDP Reported Data and Data Obtained by the PA

In its protest, the PMRS Providers claim that financial penalties associated with audit or investigation discrepancies between the PDP reported data and data obtained by the PA for a specific customer, which are greater than +/-5%, essentially are unnecessary. They suggest that the over/underpayments can be adjusted in successive payment periods over the life of the program.

The PAs agree with the PMRS Providers that payment adjustments in successive payment periods would be a sufficient and reasonable business practice for mitigating any over/underpayments. The PAs therefore will delete, in the supplemental advice letter filing to Advice 2258-E, the financial penalties associated with audit or investigation discrepancies between the PDP reported data and data obtained by the PA. Additionally, as the program develops and more information becomes available, the PAs reserve the right to revisit this issue, as necessary.

4. Advice 2258-E Should be Amended to Delete the "Proof of Sufficient Bond or Insurance Coverage" from Page 8 of Attachment A

In its protest, the PMRS Providers noted the inclusion of a new bond or insurance requirement that appears in Attachment A to AL 2258-E. PMRS Providers are

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not necessarily against this bond or insurance requirement, but express concerns about what “sufficient” levels of coverage might be and question why this requirement would be added now since it was removed from the CSI program in September of 2007.

Subsequent to filing Advice 2258-E, SCE submitted Advice 2265-E on behalf of the PAs. Advice 2265-E seeks Commission approval of a modification to the final PDP Protocols currently under consideration by the Commission in order to add a bond requirement to the final PDP Protocols. The language cited by the PMRS Providers was inadvertently included in Attachment A of Advice 2258-E and should be deleted. The PAs will delete the “Proof of sufficient bond or insurance coverage” language from Page 8 of Attachment A in the supplemental advice letter filing to Advice 2258-E. Additionally, as the program develops and more information becomes available, the PAs reserve the right to revisit this issue, as necessary.

5. The Commission Should Allow the PAs Sufficient Process Flexibility to Clarify the Issues Referenced In Item # 5 of the Protest

The PMRS Providers acknowledge that the PDP requirements attached to Advice 2258-E reflect the discussion on the larger specific issues targeted at the three workshops attended by parties in 2008. However, the PMRS Providers noted that, “the draft still fails to adequately address the questions, concerns and comments submitted by the majority of the PMRS Providers as part of their collective filing with the Commission on September 18, 2007.”

Although the PAs acknowledge receipt of the PMRS Providers’ issues identified in the attachment to the Protest, the PAs require time to adequately address these additional issues. The PAs are willing to continue negotiations towards attempting to resolve these issues and any other questions, concerns, and comments that arise during such negotiations. If the parties can agree on further modifications to the PDP requirements, the PAs will submit an advice letter to incorporate such modifications into the CSI Program Handbook. The PAs should retain sufficient flexibility to modify PDP requirements in the future as the CSI program evolves. The PAs recognize that three mechanisms exist for parties to resolve ongoing issues. The primary mechanism is the Sub-metering Work Group. If, for any reason the Sub-metering Work Group is dissolved, alternate mechanisms include the CSI Forum, which meets quarterly, and/or further workshops as necessary.

Nevertheless, the Commission should not delay approval of a supplemental advice letter filing to Advice 2258-E based on any perceived need for clarification of issues that are outside the scope of Advice 2258-E as they are ample forums to continue considering these issues.

NOTICE

Notice of AL 2258-E and 2265-E was made by publication in the Commission’s Daily Calendar on July 30, 2008 and August 16, 2008. SCE states that a copy of the

Advice Letter was mailed and distributed in accordance with Section III-G of General Order 96-B.

COMMENTS

SCE was the only party to file comments. In their comments, they point out two typographical errors and recommend that the Commission direct SCE to file, on behalf of the PAs, a compliance advice letter to that adopts the CSI Program Handbook changes required by this Resolution.

DISCUSSION OF COMMENTS

The Commission finds that SCE does not need to file a compliance advice letter that adopts the CSI Program Handbook changes required by this Resolution. The CSI Program Handbook changes included in SCE AL 2258-E and AL 2265-E have been discussed in this Resolution and any changes to the CSI Program Handbook ordered in this Resolution can be made by the Energy Division of the Commission once this Resolution is affirmed by the Commissioners of the Commission.

DISCUSSION OF RESOLUTION

The Commission adopts revised the PDP Protocols filed as part of AL 2258-E and AL 2265-E to reflect the proposed modifications set forth in SCE's reply to the protests. In Attachment 1 of this Resolution are the PDP Protocols filed as part of AL 2258-E and AL 2265-E, and including four modifications of the PDP Protocols based upon the protest of the PMRS providers and the reply comments of SCE. Throughout the development of the PDP Protocols, representatives from the CSI Program Administrators, PMRS providers and other stakeholders worked closely to make sure the concerns and needs of all parties were addressed. These PDP Protocols are the culmination of this collaboration, and the Commission is therefore adopting these PDP Protocols because they represent a consensus agreement on the substantive issues of the PDP Protocols.

PDP Protocol modification 1:

PMRS Providers requested a firm date for EDI-867 implementation, and suggested a minimum of 6 months. In response, SCE proposed a modification to the PDP Protocols that clearly states that the EDI 867 requirement be effective 6 months from the date the PDP protocols become effective. The Commission therefore adopts the following modification to the PDP Protocols:

“Data Reports must be formatted using the ANSI X.12 Electronic Data Interchange 867 protocol (EDI 867) unless otherwise specified. Sample EDI 867

Implementation Guides and Tutorials are available from each of the Program Administrators. *The EDI 867 requirement will go into effect 6 months from the day the PDP Protocols are ratified. After this effective date, all PDP Providers must, at minimum, be in the process of EDI 867 data transfer tests with one or more Program Administrators."*

(Instructions for Qualifying as a performance data provider for the California Solar Initiative, p.3)

PDP Protocol modification 2:

The PMRS Providers requested that a "three strikes and your out" penalty for failing data transfer testing be removed. In response, SCE proposed removing the requirement that PDP applicants cease business activities following an unsuccessful third test, and instead be banned from adding new customers until such time as they complete and pass their testing. The Commission therefore adopts the following modification to the PDP Protocols:

"The Program Administrator will check the test file to ensure it complies with the guidelines and notify the PDP applicant within 5 business days. Once the PDP is notified it has passed the test, the PDP is considered qualified. If the PDP applicant fails the test, they will be given 2 weeks to resolve any technical or data format issues. If a PDP applicant fails their Data Transfer Test with any individual CSI PA more than 3 times, they will not be eligible to add any additional customers in that PAs service territory until such PDP applicant passes the Data Transfer Test." (Instructions for Qualifying as a performance data provider for the California Solar Initiative, p.9)

PDP Protocol modification 3:

The PMRS Providers requested the removal of the requirement that PDPs reimburse either the CSI Program Administrator or their customer when there is a discrepancy between reported data and data obtained by the CSI PA for a specific customer that is greater than +/-5%. In response, SCE proposed removing the financial penalties in favor of a process whereby discrepancies can be adjusted in subsequent payment periods, with the exception that if a discrepancy is found during the last 3 months of the PBI payment, then the PDP may be held financially responsible. The Commission therefore proposes the following modification to the PDP Protocols:

"If an audit or investigation shows a discrepancy between the PDP reported data and data obtained by the Program Administrator for a specific customer that is greater than +/-5% and within the last three months of the PBI payment cycle, the PDP will be responsible for reimbursing the customer or Program Administrator for any such difference if it is determined that the difference is due to PDP error. The PDP will also

be put on an audit schedule by the Program Administrator. If a third audit uncovers any discrepancy due to PDP error, the PDP's approval will be revoked and the customer given an opportunity to select another PDP as described above. Audits may be conducted as stated in the CSI Handbook Section 3.4.3." (Instructions for Qualifying as a performance data provider for the California Solar Initiative, p.6-7)

PDP Protocol modification 4:

The PMRS Providers requested clarification regarding the requirement to show proof of bond or insurance coverage. In response, SCE cited AL 2265-E, which clearly stated that PDP providers maintain a bond of \$25,000. The Commission therefore proposes the following modification to the PDP Protocols:

***"Bond Requirement:** Consistent with the general market practices and requirements for installers participating in the CSI Program¹, the PAs are establishing a bond requirement for PDPs. The bond requirement will help to ensure that the PDPs adhere to all applicable provisions governing the CSI Program and the PDP Protocols. Should an end-use customer suffer damages as a result of the PDP's actions, the bond will provide a source of compensation.*

As such, in addition to the written application to the PA seeking PDP status, the PDP must arrange for and maintain a bond in favor of the State of California in the amount of \$25,000. Any claim by a customer against a PDP should follow the requirements of the specific bonding agency. If a successful claim is made against the bond and reduces the bond, then the PDP must submit a copy of the hearing decision within thirty (30) days of the decision and must also replenish the bond within sixty (60) days.

If the PDP secures a bond, a copy of the bond must be submitted with the written application. The bond must insure to the benefit of anyone who may be damaged as a result of the PDP's actions or inactions related to its services. If a customer files a complaint for damages against the PDP in civil court and makes a claim against the bond, the PDP must provide a copy of the complaint to the PA within thirty (30) calendar days of being served by registered or certified mail." (Instructions for Qualifying as a performance data provider for the California Solar Initiative, p.2)

PDP Protocol modification 5:

The PMRS Providers requested that the CSI PAs be considerate of the need to modify the PDP regulations in the future. In response, SCE stated that there are

¹The CSI Program insurance requirement is twofold. All participating CSI Program contractors must be licensed by the Contractors State License Board, and one of the requirements to be licensed includes bonding. Installers are also required to have insurance/ bonding by utility interconnection departments.

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multiple venues to address on-going implementation of the PDP Protocols. The Commission does not propose any modifications.

FINDINGS

1. By SCE Advice Letter 2258-E and 2265-E filed on July 30, 2008 and August 14, 2008 SCE proposes revisions to the CSI Program Handbook.
2. CSS-Technologies, Draker Laboratories (fka Draker Solar Design, LLC), Energy Recommerce, Inc., Fat Spaniel Technologies, Inc., Glu Networks, natcon7, PowerNab, and Pyramid Solar (jointly, hereafter, the PMRS Providers) submitted a protest dated August 16, 2008, on SCE AL 2258-E. The PMRS Providers request clarification relating to:
 - the date requirement for EDI 867 compliance
 - penalties for failing data transfer test
 - PDP reimbursement of PA or Customer
 - proof of sufficient bond or insurance coverage
 - recognition of proposed PDP Protocols modifications made as part of March 17, 2008 post-workshop comments
3. SCE submitted a response to the protest on August 26, 2008, which proposed specific modifications to the PDP Protocols to address the concerns of the PMRS Providers. All elements of the protest of the PMRS Providers have been addressed in SCE's proposed modifications to the PDP Protocols included in their reply comments.

THEREFORE IT IS ORDERED THAT:

1. The CSI Program Handbook be modified pursuant to Attachment 1 of SCE AL 2258-E and AL 2265-E is approved, except for changes to the **Data Format Requirements, PDP Non-Performance, Data Transfer Test** sections of Attachment 1, as discussed above.
2. The effective date of these changes is the effective date of this resolution, and the CSI Program Handbook should be reissued by the Energy Division as soon as practical in accordance with the details within this resolution.
3. Energy Division will conform the most current edition of the CSI Program Handbook to the revisions adopted in this Resolution.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on November 6, 2008; the following Commissioners voting favorably thereon:

/s/ Paul Clanon
Paul Clanon
Executive Director

MICHAEL R. PEEVEY
PRESIDENT
DIAN M. GRUENEICH
JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners

**California Public Utilities Commission
Energy Division Resolution E-4205
Attachment 1**

INSTRUCTIONS FOR QUALIFYING AS A PERFORMANCE DATA PROVIDER FOR THE CALIFORNIA SOLAR INITIATIVE PROGRAM

REVISED OCTOBER 1, 2008

The purpose of this document is to outline the required process and qualifications to be approved as a Performance Data Provider (PDP) for the California Solar Initiative incentive program. This document also details the data reporting requirements (format, delivery method) and schedule for Performance Based Incentive data reports. The PDP requirement is mutually exclusive of the requirements identified in the CSI Handbook for the Performance Monitoring and Reporting Services. However, the PMRS provider may provide both PMRS and PDP services. All PDPs must meet the requirements established herein in addition to the requirements set forth in the CSI Program Handbook.

BACKGROUND AND REQUIREMENTS

Utility customers participating in the California Solar Initiative (CSI) program are required to install performance meters to determine the actual output of their generation equipment. For customers enrolled under the CSI Performance Based Incentive (PBI) program, data from these meters will be used to calculate their monthly incentive payment. This data may be read and communicated to the Program Administrator (PA)² by a third-party Performance Data Provider (PDP). Customers may also elect to contract this service through their local utility company. This document provides information and instructions for non-utility providers wishing to qualify to provide PDP services.

The following are the PDP's primary responsibilities:

- Manage meter reading/data retrieval schedule
- Read and retrieve performance meter data
- Post data on appropriate Program Administrator server on a consistent and reliable schedule, per individual Program Administrator requirements.
- Validate performance data prior to providing to the PA using the approved validation rules outlined in this document

² PG&E and SCE are the Program Administrators for the California Solar Initiative program for customers in their respective service territories. The California Center for Sustainable Energy is the Program Administrator for the SDG&E service territory.

1.

- Calculate monthly production of solar generating system for incentive payment
- Format data using EDI 867 or other approved protocol
- Troubleshoot and resolve communications issues
- Store data in accordance with program requirements
- Make historical performance data available to Program Administrators as requested
- Provide technical support to Program Administrators as well as customer support
- Communicate meter/device changes to the Program Administrator
- Provide disaster recovery and data backup services as requested by respective Program Administrator
- Manage data on PDP server
- Ensure confidentiality of customer information and performance data
- Possess technical expertise and capability
- Comply with all State and Federal laws

Bond Requirement

Consistent with the general market practices and requirements for installers participating in the CSI Program³, the PAs are establishing a bond requirement for PDPs. The bond requirement will help to ensure that the PDPs adhere to all applicable provisions governing the CSI Program and the PDP Protocols. Should an end-use customer suffer damages as a result of the PDP's actions, the bond will provide a source of compensation.

As such, in addition to the written application to the PA seeking PDP status, the PDP must arrange for and maintain a bond in favor of the State of California in the amount of \$25,000. Any claim by a customer against a PDP should follow the requirements of the specific bonding agency. If a successful claim is made against the bond and reduces the bond, then the PDP must submit a copy of the hearing decision within thirty (30) days of the decision and must also replenish the bond within sixty (60) days.

If the PDP secures a bond, a copy of the bond must be submitted with the written application. The bond must insure to the benefit of anyone who may be damaged as a result of the PDP's actions or inactions related to its services. If a customer

³The CSI Program insurance requirement is twofold. All participating CSI Program contractors must be licensed by the Contractors State License Board, and one of the requirements to be licensed includes bonding. Installers are also required to have insurance/ bonding by utility interconnection departments.

files a complaint for damages against the PDP in civil court and makes a claim against the bond, the PDP must provide a copy of the complaint to the PA within thirty (30) calendar days of being served by registered or certified mail.

PDP TASK REQUIREMENTS

Data Format

Data must conform to the specific program requirements (for CSI requirements, see Section 12 of the CSI Handbook). The PBI Data Report must include 15-minute (as defined in Section 12.3.3 *Time Granularity of Acquired Data*, CSI Program Handbook) and the monthly cumulative production meter read. All PBI Data Reports must be formatted using the ANSI X.12 Electronic Data Interchange 867 protocol (EDI 867) unless otherwise specified. Sample EDI 867 Implementation Guides and Tutorials are available from each of the Program Administrators. The EDI 867 requirement will go into effect 6 months from the day the PDP Protocols are ratified. After this effective date, all PDP Providers must, at minimum, be in the process of EDI 867 data transfer tests with one or more Program Administrators.

Data Reporting, Security and Confidentiality

The PDP is responsible to ensure timely, consistent and accurate reporting of performance data. Data must be located in a secure facility, on a secure server and have firewall and equivalent protection. The PDP must protect the confidentiality of the customer information and performance data in accordance with all program guidelines (for CSI requirements, see Section 12 of the CSI Handbook). The data must be transferred to each PA using a secure FTP server and each PDP must contact the appropriate PA to obtain the secure FTP address. The PDP must follow all applicable state and federal privacy and data security laws. **The Program Administrator is not responsible for, and will not pay any customer incentives based on missing, estimated or invalid performance data.**

Data Validation

The PDP must validate all data prior to posting it to the PAs secure FTP server. The following data validation rules shall apply:

- Time Check of Meter Reading Device/System (all)
- Meter Identification Check (all)
- Time Check of Meter (all)
- Pulse Overflow Check (if applicable to metering system)
- Test Mode Check (if applicable to metering system)
- Sum Check

Descriptions of these validation rules are included in Attachment A.

Payment Validation, Data Audits, and Measurement and Evaluation Program

The Program Administrator may, at their discretion, perform validations on incentive payments prior to issuing payments to customers participating in this program. The validations will compare actual monthly incentive payments with expected payments based on design specifications and expected performance data submitted with the customers' approved incentive reservation documentation. If payments fall outside expected ranges for the month, the incentive payment will be withheld until the Program Administrator determines to its satisfaction the reason for the discrepancy.

The PDP will work with the customer to resolve any discrepancies identified by the Program Administrator, which may include testing and/or recalibrating the meter/devices if deemed necessary. The Program Administrators are not responsible for the costs associated with investigating and resolving any such discrepancies (i.e. testing, meter replacement hardware, installation labor). However, if the Program Administrator requests an investigation which finds that the metering system is accurate, the Program Administrator will pay all reasonable and necessary costs for the investigation.

The Program Administrator will also perform random audits of PDP data to ensure accuracy and compliance with the requirements outlined in this document, or as part of the CSI Measurement and Evaluation Program in accordance with Section 7 of the CSI handbook. Any PDP found to be in violation of any of these requirements will be subject to the penalties outlined later in this document. The Program Administrator, via the servicing local utility or its designated contractor may, at its discretion, inspect and test the performance meter or install separate metering in order to check meter accuracy, verify system performance, or confirm the veracity of monitoring and reporting services.

Any additional metering installed by or at the request of the Program Administrator will be paid for by the Program Administrator. However, in the event metering is installed during the course of an audit or investigation initiated by the Program Administrator where cheating or tampering is suspected and confirmed, the System Owner will be charged for these costs.

Data Retention

Raw and PDP validated interval and cumulative monthly data must be retained in accordance with appropriate program requirements (see Section 12. of the CSI Handbook for CSI program requirements). The PDP must be prepared to post historical interval data at the Program Administrator's request. The Program Administrator audit will include raw interval data which is to be maintained by the

PDP for comparison with validated interval data transmitted to the Program Administrator. The PDP is also responsible for providing backup and disaster recovery services for 100% of the data (in accordance with the CSI data retention policy outlined in Section 12 of the CSI Program Handbook)

Technical and Customer Support

The PDP must provide a technical support number to the Program Administrator for use during normal business hours (8am to 5pm Pacific time, Monday through Friday, except holidays) to help resolve any data availability, format or corruption issues, communication problems, server access problems, or other technical issues. Within those normal business hours, the PDP must respond to Program Administrator requests within two business days with a status report and plan for correcting the issues. The PDP must also provide a customer support number to respond to customer inquiries within two business days from the initial customer contact. Program Administrators will have the discretion to set deadlines for the resolution of data transfer problems/issues.

PDP Performance Exemptions

The PDP is responsible for meeting the above noted program requirements and for consistently posting performance data in accordance with the Program Administrator's scheduling and data posting requirements. At its discretion, the Program Administrator may grant reasonable allowances for occasional issues or technical problems, as well as for large catastrophic events such as earthquakes.

In the event of such catastrophic event resulting in an energy production interruption; OR in the event of metering or communications equipment failure where the production data is irretrievable by the PDP at no fault of the customer AND it can be determined that the customer's generating equipment was still operating and interconnected with the utility grid, the Program Administrator may extend the PBI incentive payment period beyond the established timeframes otherwise specified by the incentive program Handbook. The PBI incentive payment extension period will be equivalent to the same period the system energy production data is unavailable. In situations where a communications issue results in missing data but the data is retrieved at a later date, the Program Administrator will accept the retrieved data and process payment for the recovered data with the next payment period and no extensions of the PBI incentive payment period will be necessary. To submit a Data Report relative to missing data, the PDP will resubmit the respective Data Report, thereby replacing the previous incomplete report with a complete month of data.

PDP Non-Performance

The Program Administrator will not issue incentive payments to customers based on estimated data from the PDP, nor will the Program Administrator estimate

incentive payments under any circumstances. It is the PDP's responsibility to ensure timely (+ 5 days after the end of the specified reporting period) and accurate posting of validated performance data so customer incentive payments can be made.

The following conditions may result in penalties, suspension of activity, or revocation of PDP approval from the Program Administrator:

- Data not posted by specified date (10% of accounts serviced by PDP over a one month period are late).
- No data received for incentive period (per customer: no data posted 2 times consecutively OR 3 times in 6 months; and/or per PDP: no data posted for 10% of accounts serviced by PDP). Submittal of corrected data or previously missing monthly data must be received in cycle sequence.
- Data not validated in accordance with program requirements over the course of the CSI Program. (1 time)
- Estimated data posted instead of actual data. (1 time)
- Meter change information not reported within 30 days of the meter change. (3 times within 6 months)
- If an audit or investigation shows a discrepancy of $\pm 5\%$ between the PDP reported data and Program Administrator check meter production data for one data report period. This discrepancy will trigger an audit schedule set by the Program Administrator for the PDP.

The PDP will be given reasonable opportunity to correct problems identified by the Program Administrator. The Program Administrator will work with the PDP to correct any such problems and avoid unnecessary delays in issuing incentive payments to customers, to the extent feasible. However, if the PDP fails to resolve any issues to the Program Administrator's satisfaction within 60 days which result in delays in incentive payments to customers, the following penalties may apply:

- If the problem is with a single or less than 20% of customer accounts served by the PDP, the Program Administrator will suspend PDP activity with just those affected customers. The affected customers will be notified that the PDP has been unable to resolve the specified issue within an acceptable timeframe and they will be given a 30 day grace period to select and engage with another PDP. The original PDP will be required to transfer all historical data to the newly selected PDP. No incentive payments will be made until the customer provides a contract or similar document proving they are engaged with another PDP, but the customer's incentive payment period will be extended beyond the

- established period allowed under the applicable program rules to compensate for this interruption in payments. If the customer fails to engage with and provide proof that they have contracted with a new PDP within the allowable grace period, the time between the grace period expiration date and the date the Program Administrator receive such proof will be deducted from the established payment period.
- If the problem is of a more serious nature as determined by the Program Administrator and continues over 60 days, or it affects more than 20% of customers served by the PDP, the PDP's approval will be revoked and all customers will be notified that they must select another PDP. As above, no incentive payments will be made until the customer selects another PDP, but the customers' incentive payment period will be extended beyond the established payment period. The PDP will be eligible to reapply after six months upon demonstrating that they have successfully resolved all problems to the Program Administrator's satisfaction.
 - If an audit or investigation shows a discrepancy between the PDP reported data and data obtained by the Program Administrator for a specific customer that is greater than +/-5% and within the last three months of the PBI payment cycle, the PDP will be responsible for reimbursing the customer or Program Administrator for any such difference if it is determined that the difference is due to PDP error. The PDP will also be put on an audit schedule by the Program Administrator. If a third audit uncovers any discrepancy due to PDP error, the PDP's approval will be revoked and the customer given an opportunity to select another PDP as described above. Audits may be conducted as stated in the CSI Handbook Section 3.4.3.

Unless the PDP's actions results in revocation, upon receipt of a notice from the PA with respect to the PDP's failure to provide the performance, the PDP must, as soon as reasonably practicable: (1) perform a root-cause analysis to identify the cause of such a failure; (2) provide the PA with a report detailing the cause of, and procedure for correcting such failure within 3 days of completion of such root-cause analysis; (3) implement such procedure after obtaining the respective PA approval of such procedure.

Criteria for a PDP Appeals Process

Should the PDP disagree with a PA decision regarding a penalty, the PDP has the right to appeal to the CSI Working Group for further consideration.

APPLICATION PROCESS

Application & Documentation

The PDP applicant completes the attached “Application for PDP Services” and provides all documentation in the attached checklist. Note that the PDP applicant must submit separate applications to and successfully complete the data transfer test described later in this document for each utility or Program Administrator.

In PG&E’s service territory, the PDP applicant forwards the completed application and required documentation to:

Application & Documentation

The PDP applicant completes the attached “Application for PDP Services” and provides all documentation in the attached checklist. Note that the PDP applicant must submit separate applications to and successfully complete the data transfer test described later in this document for each utility or Program Administrator.

In PG&E’s service territory, the PDP applicant forwards the completed application and required documentation to:

Mail to: Program Manager, California Solar Initiative
Pacific Gas & Electric Co.
P.O. Box 770000
San Francisco, CA 94177-0001

For questions, contact: Program Manager, California Solar Initiative
Phone: (415) 973-3480
Fax: (415) 973-2510
Email: SolarPBI@pge.com
Web: www.pge.com/csi

In SCE’s service territory, the PDP applicant forwards the completed application and required documentation to:

Mail to: Program Manager, California Solar Initiative
Southern California Edison

6042A Irwindale Ave
Irwindale, CA 91702

For questions, contact: Program Manager, California Solar Initiative
Phone: (866)-584-7436
Fax: (626) 633-3402
Email: pbi@sce.com
Web: www.sce.com/rebatesandsavings/CaliforniaSolarInitiative/

In San Diego Gas & Electric's service territory, the PDP applicant forwards the completed application and required documentation to:

Mail to: California Center for Sustainable Energy
Attn: CSI Program Manager
8690 Balboa Avenue Suite 100
San Diego, CA 92123

For questions, contact: California Solar Initiative Program Manager
Phone: (858) 244-1177
Fax: (858) 244-1178
Email: csi@energycenter.org
Web: www.energycenter.org

The Program Administrator will review the submitted documentation, determine if the PDP applicant meets the program requirements and notify the PDP applicant via email. The Program Administrator will review the application and respond to the PDP applicant within 10 business days.

Data Transfer Test

Once the Program Administrator has reviewed and accepted the prospective PDP's application, they will contact the PDP applicant to schedule a data transfer test.

Program Administrators will provide PDP applicants with test data sets that the prospective PDP must download, validate, and format before submitting the Data Report back to the Program Administrator via secure FTP. The PDP applicant is also responsible for downloading the Program Administrator's EDI 867 Implementation Guide and Tutorials from its website. The PDP must contact their respective Program Administrator for specific instructions regarding this testing process.

The Program Administrator will check the test file to ensure it complies with the guidelines and notify the PDP applicant within 5 business days. Once the PDP is notified it has passed the test, the PDP is considered qualified. If the PDP applicant fails the test, they will be given 2 weeks to resolve any technical or data format issues. If a PDP applicant fails their Data Transfer Test with any individual CSI PA more than 3 times, they will not be eligible to add any additional customers in that PAs service territory until such PDP applicant passes the Data Transfer Test.

PDP Approval Initial Audit Period

Upon PA approval of the required PDP application documentation, and successful completion of the PDP data test procedures, the PDP will be qualified to provide PBI data to the Program Administrator for incentive payment. However, the PA's will audit the raw production data from each PDP's first data report for their first three customers for compliance with these PDP requirements. The PA will notify the PDP of noncompliance and will work to assist the PDP with resolving the issues.

Application to Provide PDP Services

This application and the attached documents are to be used by applicants for approval as a Performance Data Provider (PDP). Please refer to the checklist to ensure your application includes all applicable documentation.

Company Name: _____

Primary Contact: _____

Address: _____ Address 2: _____

City: _____ State: _____ ZIP: _____

Phone: (____) ____ - _____ Fax: (____) ____ - _____
Email: _____

Technical Support Contact

Contact Name: _____

Phone: (____) ____ - _____ Email: _____

Customer Support Contact

Contact Name: _____

Phone: (____) ____ - _____ Email: _____

PDP APPLICATION CHECKLIST

Background

- o Company background (years in business, number of employees, general description, executive team, etc.)
- o Meter data reading and reporting experience and capabilities, capacity, technology overview, IT capabilities, etc.
- o Proof of sufficient bond or insurance coverage

Procedures

- o Meter reading and data retrieval procedures
- o Data communication (frequency, scalability, types, troubleshooting, etc.)
- o Process for retrieving missed reads
- o Data validation procedures
- o Technical Support (hours of operations, staff levels, procedures, etc.)
- o Customer Support (hours of operations, staff levels, etc.)

IT Systems and Processes

- o Data posting (data translation, formatting, firewall access, etc.)
- o Data retention plan
- o Backup and recovery plans
- o Hardware and software scalability plans
- o Data confidentiality and security procedures

By signing this document, the applicant agrees to comply with all program requirements including those described in the CSI Handbook (signature must be someone with legal authority at the PDP). Additionally, applicant agrees to keep confidential all data received from the PA for testing. Information in this document will remain confidential.

Signature: _____ Date: _____

Printed Name: _____

Title: _____

ATTACHMENT A

CSI Data Validation Rules

Check	Purpose
Time Check of Meter Reading Device/system	Check for time drift of meter reading device/system outside standard
Meter ID Check	Check for the following: <ul style="list-style-type: none">• Meter ID reported correctly• Meter has not been changed out• Data is being reported for correct meter
Time Check of Meter	Check for time drift of meter clock outside standard
Pulse Overflow Check	Check for the following: <ul style="list-style-type: none">• Improper scaling factor in meter• Improperly sized transformer• Hardware problem
Test Mode Check	Check that data collected when meter was in test mode represents test production rather than actual production
Sum Check	Check for the following in combination meter/recorder installations: <ul style="list-style-type: none">• Crossed channels between meter & recorder• Pulse relay problems Check for the following in all installations: <ul style="list-style-type: none">• Invalid PT & CT ratios• Invalid meter constants

ATTACHMENT B

**REQUEST FOR TEMPORARY WAIVER OF EDI 867 REQUIREMENTS
UNDER INTERIM CSI PBI DATA TRANSFER RULES**

Prior to formal approval of the PDP Guidelines, PDP applicants may request a temporary waiver of the EDI 867 data transfer protocol and interim 15-minute interval data reporting requirements. It is expected that the PDP applicant will use this time to develop the capability to meet these requirements.

PDP applicants who are unable to meet the full EDI 867 data transfer protocol requirement by the date specified in the final version of the PDP Guidebook will have their PDP qualification revoked.

PDP applicants requesting a temporary waiver of the EDI 867 data transfer protocol and/or interim 15-minute interval data reporting requirements must use the attached spreadsheet template. Interim CSI PBI Data Transfer Rules are also attached.

_____ hereby requests a temporary waiver from the following requirements:

- ☐ EDI 867
- ☐ 15-Minute Interval Data Reporting

We understand that this request is only for a temporary waiver and we agree to comply with all program requirements, including the 15-minute interval data and EDI 867 data transfer protocol requirements, the date to be specified in a final version of the PDP Guidebook or sooner.

PDP NAME:

CONTACT PERSON:

AUTHORIZED SIGNATURE: _____ DATE:

Implementation Guide - Transaction Set 867 - Version 006 (CSI Specification)

28th April 2008

ST•867•000000984^a The ST is the start of the 867 Transaction Set with a control number of 000000984

BPT•00•2007-04-21-09.01.08.795475•20000421•C1••••1948•1^a The BPT marks the Beginning Segment for Product Transfer and Resale where 00 is an Original data transmitted, C1 Indicates interval data value and 1 indicates cycle shift number (1 – 1st to 1st of next month, 2 – 16th to 16th of next month)

N1•55••1•006908818••41^a Identifies the Performance Data Provider (PDP) as a uniquely assigned number that is provided by SCE

REF•10•SCE-CSI-36949^a Identifies the CSI Project ID

REF•BT•23^a Indicates Cycle number (Report number for SCCE)

REF•59•2007-04-21-09.01.08.795434^a Identifies the prior unique transaction BPT02 number **2007-04-21-09.01.08.795434** to be corrected. Only used when BPT01=CO

PTD•PM•••OZ•EL^a Identifies the type of product transfer to be physical meter information, and the product reference Identification indicates Electric Service

DTM•150••••DT•200801010000^a January 01, 2008 is the Service Period Start Date. All dates are expressed in Greenwich Mean Time (GMT).

DTM•151••••DT•200802010000^a February 01, 2008 is the Service Period End Date. All dates are expressed in Greenwich Mean Time (GMT).

REF•JH•A^a Indicates Energy is generated by the end use Customer (Addition)

REF•6W•1^a Indicates channel ID (1 for SCE)

REF•MG•O717K-001388^a The Meter Number is O717K-001388

REF•MT•KH015^a The Meter Data Type is Monthly Kilowatt Hour and 15 indicates 15 minutes interval data

QTY•32•24709^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010015^a January 01, 2008 12:15 am is the Interval end time Date.

QTY•32•2345^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010030^a January 01, 2008 12:30 am is the Interval end time Date.

QTY•32•3734^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010045^a January 01, 2008 12:45 am is the Interval end time Date.

QTY•32•1232^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010100^a January 01, 2008 01:00 am is the Interval end time Date.

QTY•32•1535^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010115^a January 01, 2008 01:15 am is the Interval end time Date.

QTY•32•1535^a The KWH data for each 15 minutes interval

SCE AL 2258E and AL 2265E/nlc

DTM•151••••DT•200801010130^a January 01, 2008 01:30 am is the Interval end time Date.

QTY•32•1535^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010145^a January 01, 2008 01:45 am is the Interval end time Date.

QTY•32•1535^a The KWH data for each 15 minutes interval

DTM•151••••DT•200801010200^a January 01, 2008 02:00 am is the Interval end time Date.

QTY•32•1235^a The KWH data for each 15 minutes interval

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Implementation Guide - Transaction Set 867 - Version 006 (CSI Specification)

Southern California Edison 28th April 2008

DTM•151••••DT•200801010215^a January 01, 2008 02:15 am is the Interval end time Date.

..

..

..

..

QTY•32•1235^a The KWH data for each 15 minutes interval

DTM•151••••DT•200802010000^a February 01, 2008 is the Interval end time Date.

SE•209•000000984^a Total Number of Segments is 209, Control Number is 000000984

PDF Created

867 Product Transfer and Resale Report

Functional Group ID=**PT**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Transfer and

Resale Report Transaction Set (867) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to: (1) report information about product that has been transferred

from one location to another; (2) report sales of product from one or more locations to an end customer; or (3)

report sales of a product from one or more locations to an end customer, and demand beyond actual sales (lost

orders). Report may be issued by either buyer or seller.

Heading:

Pos. Seg. Req. Loop Notes and

No. ID Name Des. Max.Use Repeat Comments

Must Use 010 ST Transaction Set Header M 1

Must Use 020 BPT Beginning Segment for Product Transfer and Resale

M 1

LOOP ID - N1 5

Must Use 080 N1 Name O 1

Must Use 120 REF Reference Identification O 12

Detail:

Pos. Seg. Req. Loop Notes and

No. ID Name Des. Max.Use Repeat Comments

LOOP ID - PTD >1

Must Use 010 PTD Product Transfer and Resale Detail M 1

Must Use 020 DTM Date/Time Reference O 10

Must Use 030 REF Reference Identification O 20

LOOP ID - QTY >1

Must Use 110 QTY Quantity O 1

210 DTM Date/Time Reference O 10

Summary:

Pos. Seg. Req. Loop Notes and

No. ID Name Des. Max.Use Repeat Comments

Must Use 030 SE Transaction Set Trailer M 1

Segment: **ST** Transaction Set Header

Position: 010

Loop:

Level: Heading:

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Comments:

Data Element Summary

Ref. Data

Des. Element Name Attributes

ST01 143 Transaction Set Identifier Code M ID 3/3

Code uniquely identifying a Transaction Set

SCE AL 2258E and AL 2265E/nlc

867 Product Transfer and Resale Report

ST02 329 Transaction Set Control Number M AN 4/9

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Segment: BPT Beginning Segment for Product Transfer and Resale

Position: 020

Loop:

Level: Heading:

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data

Syntax Notes:

Semantic Notes: 1 BPT02 identifies the transfer/resale number.

2 BPT03 identifies the transfer/resale date.

3 BPT08 identifies the transfer/resale time.

4 BPT09 is used when it is necessary to reference a Previous Report Number.

Comments: BPT01 = 07 is used if previously furnished information is being provided in a new file. In this case, or if data points have been corrected, only the corrected meters' data need to be provided, even if multiple meters were originally sent. If a previously transmitted file is simply being reposted for download from a server, the original designation of BPT01 = 00 or CO does not need to be changed.

Data Element Summary**Ref. Data****Des. Element Name Attributes**

Must Use **BPT01 353 Transaction Set Purpose Code M ID 2/2**

Code identifying purpose of transaction set

00 Original

Conveys original readings for the account being reported.

52 Response to Historical Inquiry

Response to a request for historical meter reading.

CO Corrected

Indicates that the readings previously reported for the account are being corrected.

Must Use **BPT02 127 Reference Identification O AN 1/30**

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

A unique transaction identification number, assigned by the originator.

Must Use **BPT03 373 Date M DT 8/8**

Date when the PDP record is created by the application (CCYYMMDD)

Must Use **BPT04 755 Report Type Code O ID 2/2**

Code indicating the title or contents of a document, report or supporting item

C1 Cost Data Summary

Interval values

Must Use **BPT08 337 Time O TM 4/8**

Time when the PDP record is created by the application (HHMM)

Must Use **BPT09 127 Reference Identification O AN 1/30**

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier.

Will represent Cycle shift number (1 or 2)

Segment: N1 Name

Position: 080

Loop: N1

Level: Heading:

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Usage: Optional (Must Use)**Max Use:** 1**Purpose:** To identify a party by type of organization, name, and code**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

Semantic Notes:**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

2 Three N1 segments will be used in California, with N101 = 55, 8S, and SJ, unless the values of N104 corresponding to N101 = 8S or SJ would duplicate the value corresponding to N101 = 55. The end-use customer's account numbers for the meter data management agent (N101 = 55), utility (N101 = 8S), and the energy service provider (N101 = SJ) must be placed in REF segments following these N1 segments, with REF01 = 10, 12, and 11, respectively.

3 When N101 = 55 (Meter Data Management Agent), N106 = 41 (Submitter). When N101 = 8S (Utility) and SJ (Energy Service Provider), N106 = 40 (Receiver).

Data Element Summary**Ref. Data****Des. Element Name Attributes**Must Use **N101 98 Entity Identifier Code M ID 2/3**

Code identifying an organizational entity, a physical location, property or an individual

>> 55 Used to identify the party that manages meter data on behalf of another. Often referred to as the Performance Data Provider (PDP).

Must Use **N103 66 Identification Code Qualifier X ID 1/2**

Code designating the system/method of code structure used for Identification Code (67)

1 SCE Assigned PDP identification code

Must Use **N104 67 Identification Code X AN 2/80**

PDP identification number assigned by SCE

Must Use **N106 98 Entity Identification Code O ID 2/3**

Code identifying an organizational entity, a physical location, property or an individual

41 Submitter

Entity transmitting transaction set

Segment: REF Reference Identification**Position:** 120**Loop:** N1**Level:** Heading:**Usage:** Optional (Must Use)**Max Use:** 12**Purpose:** To specify identifying information**Syntax Notes:** 1 At least one of REF02 or REF03 is required.**Semantic Notes:****Comments:** See Comments related to the N1 segment.**Data Element Summary****Ref. Data****Des. Element Name Attributes**Must Use **REF01 128 Reference Identification Qualifier M ID 2/3**

Code qualifying the Reference Identification

10 Account manager Code (This will be used as CSI

Project ID)

BT Reference Identifier

SCE AL 2258E and AL 2265E/nlc

Indicates Cycle number/Report Number

59 Prior Incorrect Batch Number

Only used when BPT01= CO

REF02 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Reference the value of BPT02 for file already transmitted but intended for correction

Segment: PTD Product Transfer and Resale Detail

Position: 010

Loop: PTD

Level: Detail:

Usage: Mandatory

Max Use: 1

Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes: 1 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments: 1 The PTD loop conveys consumption information for one meter or register, and for one commodity for metered service, over a number of metering intervals. Accounts which have multiple meters or registers require multiple PTD loops; the total consumption from multiple meters may be summarized in another PTD loop, qualified by SU, at the option of the Meter Data Management Agent. Accounts which have multiple services (e.g., both electric and gas) or multiple metered commodities require separate PTD loops for each service or commodity. For unmetered service, multiple commodities may be reported in a single PTD loop.

Data Element Summary**Ref. Data****Des. Element Name Attributes**

Must Use **PTD01 521 Product Transfer Type Code M ID 2/2**

Code identifying the type of product transfer

PM Physical Meter Information, including data from a meter, totalizer, or recorder.

Must Use **PTD04 128 Reference Identification Qualifier X ID 2/3**

Code qualifying the Reference Identification provided in PTD05.

OZ Product Number

Must Use **PTD05 127 Reference Identification X AN 1/30**

Reference information as defined for a particular Transaction Set or as specified by the Reference Information Qualifier.

EL Electric Service

Segment: DTM Date/Time Reference

Position: 020

Loop: PTD

Level: Detail:

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM06 is required.

2 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:**Comments:****Notes:****Data Element Summary****Ref. Data**

SCE AL 2258E and AL 2265E/nlc

Des. Element Name AttributesMust Use **DTM01 374 Date/Time Qualifier M ID 3/3**

Code specifying type of date or time, or both date and time

150 Service Period Start

151 Service Period End

MRR Meter Reading

Date of special meter read

Must Use **DTM05 1250 Date Time Period Format Qualifier X ID 2/3**

Code indicating the date format, time format, or date and time format

DT Date and Time Expressed in Format

CCYYMMDDHHMM

Must Use **DTM06 1251 Date Time Period X AN 1/35**

Expression of a date, a time, or range of dates, times or dates and times

Segment: REF Reference Identification**Position:** 030**Loop:** PTD**Level:** Detail:**Usage:** Optional**Max Use:** 20**Purpose:** To specify identifying information**Syntax Notes:** 1 At least one of REF02 or REF03 is required.**Comments:** 1 A segment containing REF01 = LU is required if PTD01 = PM

2 Segment containing REF01 = MG and MT is required unless the service delivery point is unmetered, in which case a segment containing REF01 = SC is required.

3 For interval data, the metering interval corresponding to REF01 = MT must be the same for all PTD loops.

Data Element Summary**Ref. Data****Des. Element Name Attributes**Must Use **REF01 128 Reference Identification Qualifier M ID 2/3**

Code qualifying the Reference Identification

6W Sequence Number

Identifies channel number (identifier) when there is more than one channel on a meter measuring the same quantity (e.g., two kWh channels).

>> JH Tag

Meter Role. Valid values for REF02 are:

A = Additive (this consumption contributes to the total for the account),

I = Ignore (this consumption does not contribute to the total for the account - do nothing),

S = Subtractive (this consumption must be subtracted from the total for the account).

MG Meter Number

MT Meter Data Type (see examples in REF02)

REF02 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

When REF01 is MT, the meter type is expressed as a 5-character field that identifies the type of consumption measured by this meter and the interval between measurements. The first two characters are the type of consumption, expressed in the units of measure from Data Element 355, as follows:

1N Count

Indicates meter pulses

70 Volt

SCE AL 2258E and AL 2265E/nlc

BY British Thermal Unit (BTU)

CF Cubic Feet

EA Each

HH Hundred Cubic Feet

K1 Kilowatt Demand

Represents potential power load measured at
predetermined intervals

K2 Kilovolt Amperes Reactive Demand

Reactive power that must be supplied for specific types
of customer's equipment; billable when kilowatt
demand usage meets or exceeds a defined parameter

K3 Kilovolt Amperes Reactive Hour

Represents actual electricity equivalent to kilowatt
hours; billable when usage meets or exceeds defined
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K4 Kilovolt Amperes

Measure of electrical power

KH Kilowatt Hour

TD Therms

TZ Thousand Cubic Feet

The 3-character metering interval is expressed as one of the following values:

Nnn = number of minutes from 001 to 999, DAY = daily, or MON = monthly.

For example, KHM0N represents KWH per month, K1M0N represents
maximum kW demand during the month, and KH015 represents kWh per 15
minutes interval.

When REF01 is LU, REF02 is not used.

Segment: QTY Quantity**Position:** 110**Loop:** QTY**Level:** Detail:**Usage:** Optional (Must Use)**Max Use:** 1**Purpose:** To specify quantity information**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.**Comments:** 1 Each QTY/MEA/DTM loop conveys consumption information about one metering
interval. QTY02 reports billable quantities, including demands, while MEA05 and
MEA06 report meter readings that are used to determine the billable quantities.2 If MEA03 contains a multiplier, QTY02 equals the product of the multiplier and
the meter readings reported in MEA05 and MEA06. Until it is resolved by UIG
whether a MEA segment containing a multiplier (MEA02 = MU) can also contain
meter reads, it is recommended that the multiplier should be placed in a separate
MEA segment within the QTY loop.3 QTY03 is not required if the unit of measurement has been defined by the REF02
value corresponding to REF01 = MT.**Data Element Summary****Ref. Data****Des. Element Name Attributes**Must Use **QTY01 673 Quantity Qualifier M ID 2/2**

32 Quantity Sold

Normal data transmission (not estimated, adjusted, or
anomalous)

SCE AL 2258E and AL 2265E/nlc

Must Use **QTY02 380 Quantity X R 1/15**

The value specifying interval read in KH

Segment: DTM Date/Time Reference

Position: 210

Loop: QTY

Level: Detail:

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM06 is required.

2 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes: This segment may be sent to establish the date and time of the reported values, if the applicable data are available and desired by the recipient. For interval data, the ending time of each interval should be reported if the sender or receiver requires these data

Data Element Summary

Ref. Data

Des. Element Name Attributes

DTM01 374 Date/Time Qualifier M ID 3/3

Code specifying type of date or time, or both date and time

151 Service Period End

DTM05 1250 Date Time Period Format Qualifier X ID 2/3

Code indicating the date format, time format, or date and time format

DT Date and Time Expressed in Format

CCYYMMDDHHMM

DTM06 1251 Date Time Period X AN 1/35

Expression of a date, a time, or range of dates, times or dates and times

Segment: SE Transaction Set Trailer

Position: 030

Loop:

Level: Summary:

Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Data Element Summary

Ref. Data

Des. Element Name Attributes

SE01 96 Number of Included Segments M N0 1/10

Total number of segments included in a transaction set including ST and SE segments

SE02 329 Transaction Set Control Number M AN 4/9

Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

