

ELECTRIC ESP HANDBOOK

***A GUIDE FOR ELECTRIC SERVICE PROVIDERS (ESPs)
PROVIDING DIRECT ACCESS SERVICE TO NON-RESIDENTIAL
CUSTOMERS IN PG&E'S SERVICE TERRITORY***

Pacific Electric and Electric Company – Third Party Relations

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PREFACE

ABOUT THIS HANDBOOK

Disclaimer and Warning

The services and procedures described in this handbook are consistent with Pacific Gas and Electric's (PG&E) electric tariffs, as approved by the California Public Utilities Commission (CPUC). If, however, there is a conflict between this handbook and the tariff language, the tariff will prevail. For the exact language of PG&E's currently approved tariffs, please refer to the [Web Tariff Book on the PG&E Web site](#) (see Information Websites at the end of Chapter 1 in this handbook).

PG&E advises any Electric Service Provider (ESP) or potential ESP reviewing the ESP Handbook that the procedures set forth herein are subject change without notice.

Electric rules and procedures for other utilities, including those in California, may differ from those of PG&E.

CHAPTER 1

ABOUT DIRECT ACCESS SERVICE

Overview

This chapter provides a summary of the framework around Direct Access Service, as well as the forms, agreements, rules and rate schedules relevant to participation in the program. This information is intended to provide Electric Service Providers (ESPs) with an understanding of general aspects of the program, as well as the location of key documents and reference sites.

Framework for Direct Access Service

- The Direct Access market is currently a closed market and only non-residential customers can participate in the event load space becomes available under the Overall Direct Access Load Cap per the CPUC guidelines. There is no maximum amount of load, or maximum number of customers, that can participate.
- As of March 11, 2010, the Direct Access market was closed to new residential customer participants.
- For customers who would like to participate in the Direct Access Program, the customer must submit a Six-Month Notice to participate during the Annual Direct Access Lottery. The Lottery is a process by which customers can submit a Six-Month Notice and receive a randomly assigned number and be placed on a Wait List in the order assigned by a randomizer in the event load becomes available. The customer will be maintained on the Wait List for the subsequent calendar year until the next enrollment period commences.

Forms and Agreements

The following documents are important to the initiation of and continuing participation in Direct Access Service. Most and perhaps all of them will be necessary for the ESP to function within the PG&E program. The documents are available through the "[ESP Documents](#)" link on the ESP Resource Center Web site.

NOTE: ESPs are advised to consult with their ESP Account Manager before working with the following documents. (See Contacts, at the end of this handbook)

- Direct Access Service Agreement (Form 79-948)
- Authorization to Receive Customer Information or Act Upon a Customer's Behalf (Form 79-1095)
- ESP Credit Application
- Direct Access Consolidated Billing Options Worksheet *
- PG&E Consolidated Billing Pricing Worksheet *
- Electric Service Provider Information Form
- Electronic Data Interchange (EDI) Trading Partner Agreement (Form 79-861)
- EDI Setup Form

NOTE:

*** Only required if the ESP elects PG&E Consolidated Billing (i.e. Bill Ready or Rate Ready)**

PG&E Rules and Rate Schedules

The following rules and rate schedules are the primary portions of PG&E's electric tariffs that are relevant to providing Direct Access service. They are available through PG&E's [Tariff Book Web site](#).

- Rule 8 – Notices
- Rule 9 – Rendering and Payment of Bills
- Rule 11 – Discontinuance and Restoration of Service
- Rule 17.1 – Adjustment of Bills for Billing Error
- Rule 22 – Direct Access
- Rule 22.1 – Direct Access Service Switching Exemption Rules
- Rule 25 – Release of Customer Data to Third Parties
- Rate Schedule E-ESP – Services to Electric Service Providers
- Rate Schedule E-ESPNSF – Electric Service Providers Non-Discretionary Service Fees
- Rate Schedule E-EUS – End User Service
- Rate Schedule E-FFS – Franchise Fee Surcharge

Information Websites

ESPs may wish to add the following sites as “favorite” links on their web browsers for easy access to information about PG&E’s Direct Access Service.

NAME	ADDRESS
Pacific Electric and Electric Company PG&E’s ESP Site	WWW.PGE.COM HTTPS://WWW.PGE.COM/EN_US/FOR-OUR-BUSINESS-PARTNERS/RETAIL-ENERGY-SUPPLIERS/ELECTRIC-SERVICE-PROVIDER-RESOURCE-CENTER/ELECTRIC-SERVICE-PROVIDER-RESOURCE-CENTER.PAGE
PG&E’s DA Website	WWW.PGE.COM/DIRECTACCESS
PG&E’s Web Tariff Book	WWW.PGE.COM/TARIFFS
EDI (Electronic Data Interchange) for Consolidated ESP Billing	HTTP://WWW.PGE.COM/EN/MYBUSINESS/SERVICES/EDI/INDEX.PAGE
California Public Utilities Commission	WWW.CPUC.CA.GOV/
California Energy Commission	WWW.ENERGY.CA.GOV
California Public Utilities Commission ESP Registration	HTTP://WWW.CPUC.CA.GOV/ESP/
UUT Website	HTTP://WWW.UUTINFO.ORG/UUTINFO_CITY_MENU.HTM

CHAPTER 2

BECOMING AN ACTIVE ESP WITH PG&E

Overview

This chapter details how ESPs can become eligible to participate in PG&E's Direct Access Service and become active ESPs.

Eligibility requires establishing creditworthiness with PG&E based on completing the Direct Access Service agreement, [receiving approved CPUC registration](#), completing the Electric Service Provider Information Form, completing the credit application, and fulfilling the Electronic Data Interchange (EDI) requirements.

After meeting these requirements, an ESP is eligible to be listed as a participating ESP.

To supply electricity to an existing residential or non-residential Direct Access end use customer or a non-residential end-use customer who has been offered and accepted DA load space from PG&E, the ESP must obtain the customer's authorization, as described in [Electric Rule 22](#). An ESP will notify PG&E of the authorization it has obtained by submitting an electronic Direct Access Service Request (DASR). If the DASR was submitted 7 days before the meter read date, customer will be switched on the next meter read date. However, if the DASR was submitted less than 7 days before the next meter read date, then customer will switch two meter read dates from the current meter read cycle.

NOTE: The material in this chapter was designed to help guide ESPs through the qualifying process. However, ESPs will generally benefit from the assistance of an ESP Account Manager to facilitate this process. For answers to questions or concerns specific to your organization, please do not hesitate to contact Third Party Relations.

Prerequisites

ESPs should determine and communicate to PG&E the billing option they will use (see Chapter 8: Billing for a discussion of available options). Credit review and authorization will be based on the amount of load served, the billing option selected, and the services contracted for (see Chapter 4: Establishing Credit for a discussion of available options).

As an ESP’s forecast of load, billing option and storage requirements change over time, the ESP should continue to evaluate the effect of the changes on their credit position with PG&E. Communication of these and other matters of your business planning with your PG&E Account Manager will allow PG&E to serve you better.

NOTE: Creditworthiness requirements are specified in PG&E’s [Rules 22](#), accessible through PG&E’s Web Tariff Book (see Information Websites at the end of Chapter 1 in this handbook).

Checklist of Key Steps

#	STEP
1.	Download the required documents
2.	Complete the PG&E Electric Services Credit Application and submit required financial information to ESP Account Manager.
3.	Complete the Direct Access Agreement and related forms.
4.	Complete registration with the CPUC .
5.	Establish any necessary credit requirements with PG&E.
6.	Complete the EDI Trading Partner Agreement and EDI setup form (if doing Consolidated ESP Billing).
7.	Complete Direct Access Service Request (DASR) process setup and testing
8.	Submit Connect DASRs
9.	Receive 12 months of historical customer electric usage data

NOTE: Estimated time for completion may vary depending on the billing option(s) selected and other processes. Consult the ESP Account Manager for a better estimated timeline.

The ESP will need to submit two (2) copies of all original documents. Original signatures are required on all copies of documents containing signature blocks for the ESP. Submit all ESP documents via regular or express mail to Third Party Relations at the following address:

Pacific Electric and Electric Company
 Third Party Relations – Direct Access Program
 P.O. Box 770000
 M/C N8C

San Francisco, CA 94177

Documentation review and processing should be complete within ten days of receipt of a complete set of contracts, forms, and credit information.

PG&E will execute and return a copy of the Direct Access Service Agreement to be used by the ESP when registering with the CPUC. When all required certifications and documents have been properly completed and the ESP has established the required PG&E credit the ESP can start serving customers in PGE territory.

CHAPTER 3

DATA EXCHANGE SET-UP AND DASR PROCESSING

Overview

Prior to submitting Electric Direct Access Service Requests (DASRs), an ESP must be capable of transmitting and receiving information over the Internet using the Data Exchange Server (DES). Electric DASRs that are transmitted to PG&E through DES must follow the [Electronic Data Interchange Implementation Guide, version 4010, 814 Transaction Set](#).

The section containing the Implementation Guide is located under: *814 - Direct Access Service Request (DASR)*. A specific link is available on that page to the Electronic Data Interchange site. The URL for the Electronic Data Interchange site is:

http://www.pge.com/includes/docs/pdfs/mybusiness/resources/large/edi/direESPccesstransactions/814_guide_v1.pdf

PG&E switches customers to and from an ESP using the DASR process. The DASR Process utilizes the EDI 814 to exchange customer switching data with ESPs.

This chapter discusses the setup of procedures that the ESP should follow in order to ensure a successful data exchange process with PG&E. The chapter also discusses the use of these procedures to send and collect data using the data exchange process as well as troubleshooting error and rejection codes for DASRs.

Prior to offering Direct Access Service to end-use customers through submission of a Direct Access Service Request (DASR), the ESP must satisfy certain requirements with respect to electronic data interchange and metering. For instance, the ESP must both establish a systems infrastructure, which is capable of handling the transmission of information in a format acceptable to PG&E, and also have the capability to exchange information with PG&E over the Internet.

Checklist of Key Steps

#	STEP
1.	Prepare systems setup for Electronic Data Interchange
2.	Review electronic transfer procedures and rules as designated by PG&E for DES and EDI (if applicable)

Procedures

This section provides a detailed discussion of the process steps outlined within the Checklist of Key Steps.

1. Prepare systems setup for Electronic Data Interchange

The first step involved with electronic data transfer is to establish a systems environment, which can support the processing requirements related to DASRs and Consolidated ESP billing transactions. The following requirements summarized below are further elaborated upon in Rule 22:

1. An ESP will be required to meet electronic data interchange requirements as specified by PG&E. To commence the process for establishing this requirement, the ESP must contact PG&E.
2. An ESP must have the capability to exchange data with PG&E via the Internet.
3. The ESP must have the capability to communicate meter reading and usage data.
4. The ESP must have the capability to perform Electronic Data Interchange (EDI).

2. Review electronic transfer procedures and rules as designated by PG&E for DES and EDI (if applicable)

ESPs who participate in Direct Access program with PG&E will need to conform to specific electronic transfer procedures and rules as discussed below.

DATA TRANSFER SPECIFICS: HOW DES IS USED TO EXCHANGE DIRECT ACCESS INFORMATION

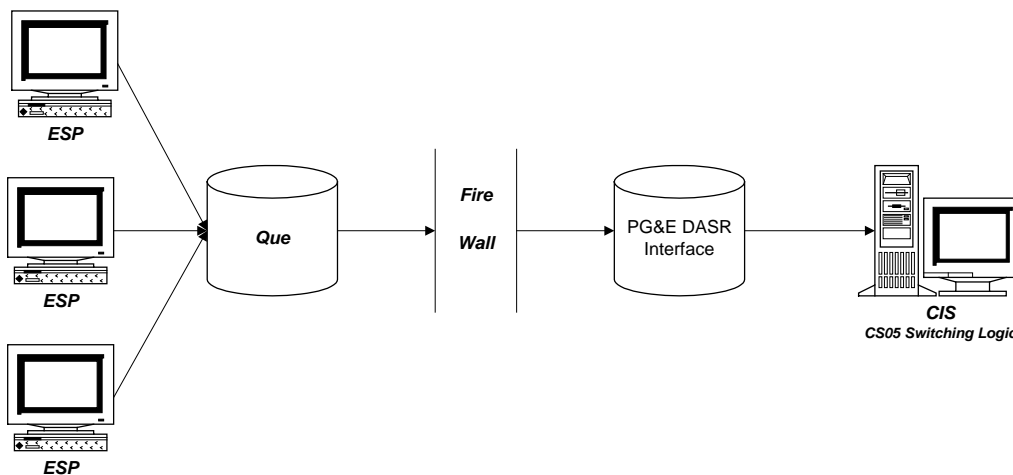
DES was developed specifically to transmit electricity and electric utility metering, billing, and administrative information contained within DASRs between ESPs and UDCs.

Information is transmitted between the ESP and PG&E through DES over the Internet (World Wide Web). All DASRs that the ESP submits through DES are transmitted to a data repository external to PG&E's firewall called the "QUE" and are automatically time stamped upon arrival. The time stamp determines the priority of the DASR. These DASRs are then forwarded in order

of priority to a server inside PG&E’s firewall called the PG&E DASR Interface (“DASR Interface”), where they are further processed by priority within PG&E’s Customer Information System (CIS).

DASRs that PG&E transmits to the ESP are initially placed in the DASR Interface and then forwarded to the QUE, from which the ESP can download or view the DASRs.

The diagram below depicts the information channels used when DASRs are submitted.



2.1: DASR submittal information flow channels

DES Implementation

KEY DES CONTACTS

Questions regarding DES protocol or systems implementation requirements related to EDI should be directed to the EDI Operations contact listed in Appendix A.

EDI Data Transfer

Electronic Data Interchange (EDI) is the exchange of business data in a standardized format between business computer systems. EDI represents a fundamental change in the way companies transact business. It replaces paper-intensive functions with efficient electronic transactions and eliminates the need for printing and mailing business information. By using standard formats and languages, the computerized data can be electronically transmitted between two companies and interpreted automatically.

The process of sending data via EDI requires a series of steps on the part of the sending and receiving partners (known as Trading Partners). Once the foundation of your EDI message is defined, most of these steps will be either automated or procedures will be developed.

Pacific Electric and Electric Company presently utilize Value Added Networks (VANs) for EDI Outbound 810 billing transactions. We also have the ability to utilize EDI over Internet connectivity for EDI Outbound 810 billing transactions to Energy Service Providers.

The EDI contacts below can provide valuable guidance and advice. EDI Direct Access transaction sets are summarized below the contact table.

EDI Contacts

Questions regarding EDI protocol or systems implementation requirements related to DES should be directed to EDI Operations contact listed in Appendix A

Note: For additional, detailed information on the EDI process, visit the [EDI Web site](#).

EDI Direct Access Transaction Sets

TRANSACTION SET 248 – DAILY BILLING FILES

The 248 Transaction Set is used to provide PG&E billing data in an electronic format to ESPs. The billing data will communicate any adjustments that have been made for specific customers.

TRANSACTION SET 810 – BILLING

The 810 Transaction Set is used to provide PG&E billing data in an electronic format to its customers. The billing data provided electronically reflects the same information that appears on a traditional paper bill and is consistent with national standards for EDI. The 810 is only needed if the ESP is billing the customer for PG&E's charges or when using PG&E Consolidated Billing Option – Bill Ready.

TRANSACTION SET 814 - DIRECT ACCESS SERVICE REQUEST (DASR)

The 814 Transaction Set or DASR is sent between the Utility and Energy Service Providers (ESPs) for purposes such as connecting a customer (i.e. Connect Request), updating a significant customer event (i.e. Update Request/Notification), or disconnecting a customer (i.e. Disconnect Request).

NOTE: that a ESP that exchanges 814 EDI data with PG&E must also be able to receive 867 EDI. The 867 is used to pass the required 12 months of usage history for the customer to the ESP.

TRANSACTION SET 820 - PAYMENT AND REMITTANCE ORDER (CONSOLIDATED ESP BILLING ONLY)

The 820 Transaction Set is used to make a payment and send a remittance advice. It is a remittance advice identifying the detail needed to perform cash application to the payee's

accounts receivable system. PG&E's application requires that the 820 go through a financial institution. The 820 is only needed if the ESP is providing Consolidated ESP Billing (used in conjunction with the 810 transaction).

TRANSACTION SET 867 - METER USAGE

The 867 Transaction Set is used to transfer meter usage data. The 867 will be sent as an outbound file to the ESP. Refer to the implementation checklists below for both the 867 inbound and outbound requirements.

TRANSACTION SET 997 - FUNCTIONAL ACKNOWLEDGMENT

Transaction Set 997 can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange.

Processing Direct Access Service Requests (DASRs)

Overview

This section discusses the processing cycle associated with Direct Access Service Requests (DASRs) and the establishment of ESP services to include: enrollment, cancellation of DASRs, service termination, and account maintenance. The chapter also describes how DASRs are prioritized for processing once received by PG&E and when electric service will commence after a DASR has been accepted. The current term for the PG&E account identifier is Service Agreement Identification Number or SA ID. This is a unique identifier for each customer and location. The term Account ID is used to identify a group of SA IDs and is not used to identify the unique customer in the DASR.

Definition of Terms

Direct Access Service Requests (DASRs) are the electronic records used to initiate, update and cancel Direct Access service options between ESPs and end-use customers. ESPs are authorized by end-use customers to submit DASRs for service accounts that desire to switch to the ESP, change ESPs, cancel ESPs, etc. An approved DASR will become a part of the ESP Service Agreement and will be used to define the services that PG&E will be providing to the customer.

Customers with more than one SA ID with PG&E at the same premise may choose direct access, community choice aggregation service, or full service for each eligible SA ID. However, a customer may not partition the electric loads of a SA ID among different electric service options or electric service providers.

In order to establish ESP service for end-use customers, ESPs must submit DASRs which provide detailed information about the service requirements for a given customer. An end-use customer may not directly submit a DASR to PG&E unless that customer has completed the registration process to act as an ESP on its own behalf. The ESP must submit all DASR

information electronically through DES using the protocol discussed previously within the Electronic Data Interchange section above.

Checklist of Key Steps

#	STEP
1.	ESP obtains customer authorization to submit a DASR on their behalf
2.	ESP determines DASR transaction and obtains customer information required to complete the DASR
3.	ESP submits the DASR to PG&E through DES.
4.	PG&E processes the DASR.
5.	PG&E sends a confirmation, rejection, or pending notification to ESP

Procedures

This section provides details outlined within the Checklist of Key Steps.

1. ESP obtains customer authorization to submit a DASR on their behalf

An ESP must receive authorization from the end-use customer in order to submit a DASR on its behalf. The customer can authorize any of the available DASR transactions such as setup, termination, and switching of ESPs.

2. ESP determines DASR transaction and obtains customer information required to complete the DASR

ESPs can designate different types of transactions on a given DASR. The table below lists the transactions, which the ESP can initiate on behalf of an end-use customer. The table also identifies key customer information that the ESP will need to obtain depending on the type of transaction. In addition to the customer information outlined below, there are additional field requirements for each of the transactions. These requirements are available through the DES Web site at (see Information Websites at the end of Chapter 1 in this handbook).

The designations correspond to those specified in the DASR transaction descriptions.

TRANSACTION	DESCRIPTION OF TRANSACTION	REQUIRED CUSTOMER INFORMATION
REQUEST/CONNECT SP-REQ/CONNECT	SETUP/ESTABLISH DIRECT ACCESS WITH CUSTOMER	<ul style="list-style-type: none"> Customer Name Service Account Address and current service Zip Customer Service Agreement (SA) ID Service Relationship Provided Provider (ESP, UTC) Commodity (i.e. electric, electric) Billing Option (i.e. PG&E Consolidated, Consolidated ESP, Separate)
REQUEST/DISCONNECT SP-REQ/DISCONNECT	DISCONTINUE DIRECT ACCESS WITH CUSTOMER	<ul style="list-style-type: none"> Customer SA ID Service Relationship Energy Provided (i.e. electric, electric) Customer Name Service Account Address and current service Zip
RESPONSE/CONNECT – ACCEPT ACK/CONNECT	ACKNOWLEDGE RECEIPT OF SWITCH NOTIFICATION	<ul style="list-style-type: none"> Provide information contained in the acknowledgment of actual switch of service provider (Outbound Transaction)
REQUEST/ACCOUNT MAINTENANCE SP-REQ/MAINT	ACCOUNT MAINTENANCE (I.E., CUSTOMER RATE SCHEDULE CHANGE)	<ul style="list-style-type: none"> Customer SA ID Service Relationship Energy Provided (i.e. electric, electric) Customer Name Service Account Address Account information the customer wants to change
REQUEST/ACCOUNT UPDATE SP-REQ/UPDATE	ACCOUNT UPDATE (I.E. METERING RELATIONSHIPS, BILLING OPTIONS)	<ul style="list-style-type: none"> Customer SA ID Service Relationship Energy Provided (i.e. electric, electric) Customer Name Service Account Address Account information the customer wants to change

3. ESP submits the DASR to PG&E through DES

Upon entering the required DASR transaction information, the ESP submits the DASR file through DES.

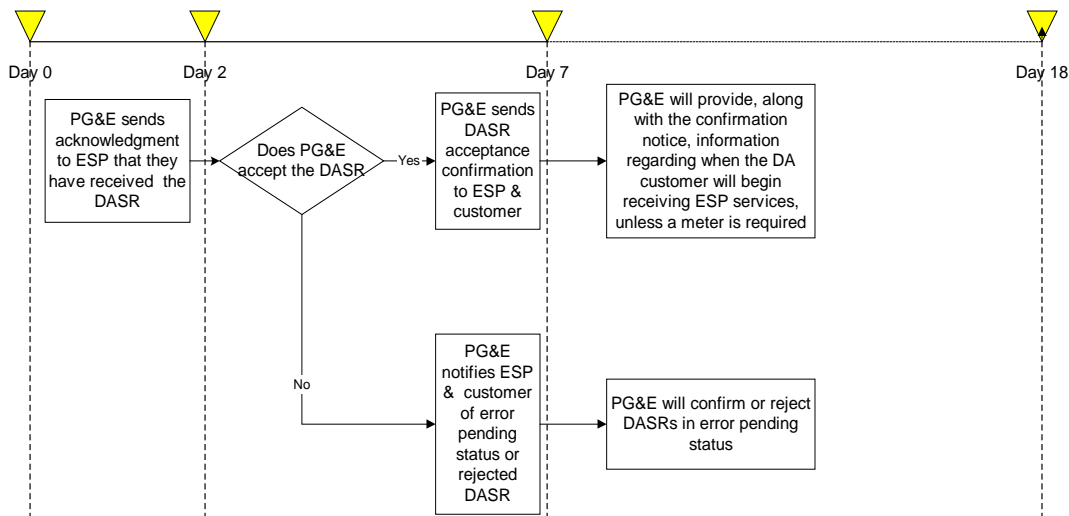
Successful implementation of the data exchange test procedure outlined with the previous chapter requires the ESP to install the put.exe and get.exe files locally. If put.exe and get.exe are not currently installed on the ESP’s local workstation, the ESP will need to install these programs. The link is <https://esft.comp.pge.com>. Guide is provided below.



Enterprise Secure File Transfer Guide

4. PG&E processes the DASR

The illustration below represents the timing associated with processing a DASR.



4.1 - DASR PROCESSING TIMELINE

ELECTRONIC VALIDATION

All DASRs undergo both transaction level validation and customer account validation, as described in the Account Validation section below. All validation rules are covered at <http://www.pge.com/edi/>.

DASR VALIDATION

PG&E will electronically validate DASRs for accuracy and completeness. DASRs failing the basic accuracy validation will be rejected back to the Sending ESP. PG&E will communicate the reasons for rejecting a DASR in the Comments field of the DASR. PG&E will submit a confirmation, rejection or pending DASR to the ESP within seven (7) business days of receipt.

ACCOUNT VALIDATION

Following successful accuracy validation, PG&E will attempt to electronically match the **Interchange Receiver ID** field of the DASR to PG&E's computer information system. PG&E's customer Service ID is printed on the "Details" page of the customer's Energy Statement. However, due to the instability of the customer Service ID, PG&E has developed a unique non-

changing customer-commodity-location specific number called the **External Reference ID or “XREF ID.”**¹ Once the XREF ID has been assigned to an ESP commodity account, it will not change throughout the life of the account unless ESP is cancelled. Essentially, the XREF ID provides a way to readily identify ESP commodity accounts and to reference the history of the commodity even if the customer switches to different ESPs. PG&E will communicate the customer’s “XREF ID” (rather than “Service ID”) to the ESP in the acceptance confirmation DADR. The Connect DADR will validate on the Service ID or XREF ID. The customer’s PG&E XREF ID is intended for use in all future transactions related to this customer’s service location and commodity. The PG&E SA ID or XREF ID is a requirement of all transactions.

When a customer’s commodity account (i.e. electric or electric) undergoes its first DADR transaction, the current Service ID will be used to populate the XREF ID field and a new Service ID will be assigned to the commodity account. The Service ID replaces the “SA ID” on the current DADR form and is also represented on the “Details” pages of the customer’s bill.

In the event that a system validation fails to match the Interchange Receiver ID supplied in the DADR, or the account/commodity status is other than open, the DADR will be rejected using the standard DADR acknowledgment process.

Various PG&E programs and services require additional manual account preparation for certain Direct Access requests. These DADRs will be accepted by PG&E and an ESP effective date, if applicable, will be established and communicated to the ESP in the confirmation DADR. The most common reasons for memo status will likely relate to metering installation and setup issues.

5. PG&E sends a confirmation, rejection or pending notification to ESP

Depending upon the results of the validation process, PG&E will electronically send a DADR acceptance confirmation, rejection, or pending notification to the ESP. A letter notification will also be sent to the customer.

ACCEPTANCE NOTICES

An acceptance notice confirms that the DADR has been submitted successfully. If the DADR represented a setup transaction and a meter installation is not pending for the service account, then a notice acknowledging the switch date of the service provider will also be sent to the ESP and to the customer.

REJECTION DADR

A rejection notice provides specific information on why a given DADR was rejected. (Rejection codes provided in the attached spreadsheet as references)



DADR Rejection Codes

Additional DASR procedures performed by PG&E

Based upon the requested services designated by the ESP, PG&E may be required to perform additional DASR procedures in order to complete the processing of the DASR transactions as described below.

ADDITIONAL SETUP TRANSACTION PROCEDURES

Billing and Billing Calculation Options. ESPs will state their billing preference in each DASR. Three billing options are allowed with DA including: 1) UDC (consolidated bill with both ESP and PG&E charges), 2) SP (Consolidated ESP bill for both ESP and PG&E charges), or 3) DUAL (PG&E bills for PG&E's transportation and distribution charges and ESP bills for ESP's electricity charges). PG&E will communicate the enrolled billing option in the confirmation transaction to the ESP. An example of an invalid billing option is a DASR requesting Consolidated ESP billing by an ESP that is not authorized to perform Consolidated ESP billing. Once the account has been prepared for the requested billing option, PG&E will issue a new confirmation DASR to the ESP informing them of the billing option change and effective date.

Various PG&E programs require manual account preparation for consolidated billing. PG&E will determine which accounts require manual follow-up and will default those accounts to separate billing pending account preparation for consolidated billing. Customer account billing options, which may require manual preparation, include:

Balanced Payment Plan (BPP). PG&E's Balanced Payment Plan (BPP) provides customers with levelized monthly bills. However, due to the various billing options offered with DA, PG&E will not be able to offer BPP to ESP accounts. Therefore, if a DASR is received and the account is enrolled in BPP, PG&E will remove the account from BPP and send the customer a bill for the account's outstanding balance. This operation will not hinder the account from becoming a DA account.

Automatic Payment Service (APS). PG&E's Automatic Payment Service (APS) provides customers the ability to pay their PG&E bill through an automatic debit of their personal bank account. For those accounts that will be served under the Consolidated ESP billing option, APS must first be removed from the account before Consolidated ESP billing can be put into effect. PG&E will flag the account for removal from APS. Following account preparation, PG&E will place the account on Consolidated ESP billing and issue a confirmation DASR, informing the ESP of the billing option change and effective date.

Electronic Data Interchange (EDI). EDI provides the customer with the ability to pay their UDC bill using an EDI interface (820 Transaction Set). Before moving accounts to/from EDI status, PG&E may follow-up to confirm the customer's next EDI bank payment clears the account's balance. PG&E will follow-up customer payment issues associated to EDI Banking and Remittance.

Balance Due. The ESP must advise its customers that all past due balances owed for bundled utility service must be paid prior to the start of Consolidated ESP billing service. PG&E may pursue collection of the balance owing for bundled service from the customer in accordance with its applicable rules, including if appropriate termination of the customer's service.

Rate Schedule Application. DASRs requesting the PG&E Consolidated billing option must include a valid ESP Rate Name (SP Rate Schedule). ESPs may submit account maintenance DADR transactions to request a change to the SP Rate plan assigned to the account.

ADDITIONAL TRANSACTION PROCEDURES FOR NEWLY ESTABLISHED PG&E SA IDs

Turn On (T/O). A PG&E service turn-on (T/O) order is initiated when a customer establishes a new account with PG&E. The SA ID is the Service Agreement number. Customers must receive an SA ID from PG&E prior to ESP submittal of a DADR for the customer at the new location. This is a unique customer and account identifier.

ADDITIONAL SHUT OFF (S/O) AND SHUT-OFF NON-PAYMENT (SONP) TRANSACTION PROCEDURES

Shut-Offs initiated by the DA customer. In the event that a customer contacts PG&E to close its utility service account, PG&E will notify both the servicing and pending ESP with a termination DADR. PG&E will notify the current ESP by electronic mail in the event of a shut-off non-payment.

When a ESP customer declares bankruptcy, the active account at the time of the bankruptcy is closed. A new account is opened as a "Debtor In Possession" account. This action is required by PG&E in order to separate the customer financials before the bankruptcy from the financials after the bankruptcy. The process of closing the old account and opening the new account generates a disconnect of the ESP service for the old account. PG&E then creates a DADR to connect the new post-bankruptcy SA ID to the ESP. This provides unbroken ESP service to the customer.

ADDITIONAL CANCELLATION TRANSACTION PROCEDURES

The pending ESP may request cancellation of pending ESP service. The pending ESP can cancel a scheduled switch by submitting a DADR transaction, at least three business days before the scheduled switch date. The request to cancel will be effective immediately. The existing service provider (ESP or UDC) will remain in effect.

The current ESP may request termination of current ESP service. The current ESP may terminate service with a customer at any time. The request to terminate service will be effective according to normal ESP switching logic. The switch date will be the next scheduled meter read date, which occurs five (5) or more days after the DADR has been received in the DADR Interface. Once the switch occurs, the customer would remain a full-service customer with PG&E for at least one billing cycle before it could establish ESP service with another ESP.

ADDITIONAL CUSTOMER ACCOUNT DATA CHANGE TRANSACTION PROCEDURES

PG&E will modify its customer account information upon direct customer request only, therefore, DASRs received by ESPs communicating customer data changes will not be accepted and will reject back to the initiating ESP.

ESPs may however, request their customer's account information record from PG&E using the [Customer Information Release Form](#) and email it to ESPServicesCISR@pge.com. Upon request by the current or pending ESP, PG&E will respond with a standard DASR Customer Account Information record.

ADDITIONAL PROCEDURES FOR INITIAL CUSTOMER HISTORICAL USAGE INFORMATION

Upon DASR confirmation, up to 12 months of customer historical usage information will be released automatically to the pending ESP if PG&E is acting as the electric service provider.

CHAPTER 4

ESTABLISHING CREDIT

Overview

This chapter outlines the Creditworthiness Requirement (CWR) for ESPs to demonstrate creditworthiness to operate in the service territory. Discussion topics include establishing credit, calculating security deposits, and posting collateral.

Establishment of Credit

An ESP must complete and submit the [Credit Application](#) to PG&E prior to commencing operation.

In addition to the Credit Application, the ESP must supply PG&E with sufficient financial information per PG&E's request. If the ESP refuses to comply, PG&E may reduce the unsecured credit limit or terminate the ESP Agreement.

Based on PG&E's creditworthiness evaluation of the ESP, PG&E may extend to the ESP an unsecured credit limit. In lieu of the creditworthiness evaluation, the ESP may submit a security deposit in the form outlined below.

Security Deposit

The security deposit may be submitted in the form of the following:

SECURITY DEPOSIT	ADDITIONAL INFO
CASH DEPOSIT	CASH DEPOSITS WILL EARN INTEREST
LETTER OF CREDIT	MUST BE ISSUED BY AN INSTITUTION ACCEPTABLE TO PG&E
GUARANTY	A GUARANTY IN FORM, SUBSTANCE, AND AMOUNT SATISFACTORY TO PG&E (CREDIT RATING OF BAA2 OR HIGHER FROM MOODY'S OR BBB OR HIGHER FROM STANDARD AND POOR'S, FITCH OR DUFF & PHELPS)

SECURITY DEPOSIT	ADDITIONAL INFO
SURETY BONDS	ISSUED BY A MAJOR INSURANCE COMPANY ACCEPTABLE TO PG&E

ESP Financial Security

ESPs are required to post a bond, an irrevocable letter of credit, a cash deposit, a guarantee from an investment grade rate guarantor and/or other financial security reasonably acceptable to the CPUC and should be payable directly to CPUC sufficient to cover the re-entry fees associated with the involuntary return of its DA customers to PG&E's bundle service.

THE CALCULATION

The bond will include the incremental administrative costs related to switching customers back to bundled service, the incremental procurement costs for involuntarily returned residential and small commercial service accounts that are not affiliated with a large DA customer contract for a sixty day safe harbor period and then for an additional six-month period. Small commercial customers are referred to billing demand of less than 20 kW for 3 consecutive months.

In the calculation, the ESP is responsible for identifying and certifying residential and small commercial service accounts that are affiliated with a large DA customer contract on an annual basis. Residential and small commercial service accounts that are not timely certified by the ESP as being affiliated with a large DA customer contract will be deemed to be an unaffiliated residential or small commercial service account for purposes of determining the financial security amount.

BIANNUAL UPDATE

This calculation is performed twice a year: May and November. Any adjustments to the financial security amount will be implemented on the following July 1 or January 1, respectively. The ESP is responsible to adjust the financial security amount if and when it is more than 10% above or below the ESP's current posted financial security amount with the CPUC.

The posted financial security may be a bond, an irrevocable letter of credit, a cash deposit, a guarantee from an investment grade rated guarantor and/or other financial security reasonably acceptable to the CPUC and should be payable directly to the CPUC. The issuer of a bond or irrevocable standby letter of credit must have an investment grade rating equivalent to at least an A- by S&P and A3 by Moody's and must be acceptable to the CPUC.

CHAPTER 5

BILLING

Overview

This chapter discusses the different billing options under which non-residential transport customers may be billed under Direct Access Service. Consolidated ESP, Separate (Dual) Billing, and PG&E Consolidated billing are available.

Bill Components and Billing Options

Summary of PG&E end-use customer charges

PG&E's electric bills for end-use non-residential customers that are receiving Direct Access service from an ESP consists of the components described in the table below.

BILL COMPONENT	DESCRIPTION
PG&E TRANSPORTATION CHARGE	This charge, which differs for the various customer classes, covers charges from PG&E's transmission system, distribution system, billing, metering, public purpose programs, and various other cost components.
SCHEDULE E-FFS, FRANCHISE FEE SURCHARGE	An electric franchise fee surcharge is charged to all direct access customers on the electric volumes purchased by the ESPs and transported by PG&E, unless otherwise exempted. See rate Schedule E-FFS for details.

Billing options

The billing options available to an ESP are:

Separate (Dual) Billing. The customer receives separate bills from PG&E, for PG&E's transportation charges; and from the ESP, for electric procurement charges. Customer will

remit separate payments to PG&E for PG&E transportation charges and to ESP for the ESP's electric procurement charges.

PG&E Consolidated Billing – Rate Ready. The customer receives both portions of its bill from PG&E in a single consolidated bill. The ESP charges are calculated by PG&E and put on the bill, based upon daily customer charges and per kW rates provided by the ESP each month. Customer will remit full payment to PG&E and PG&E will reallocate payments back to the ESP based on an allocation structure.

PG&E Consolidated Billing – Bill Ready. The customer receives both portions of its bill from PG&E in a single consolidated bill. The ESP charges are calculated by the ESP, based upon usage provided by PG&E. PG&E's bill "waits" maximum of 3 days for the ESP to provide its charges via EDI 810, and then puts those charges on the PG&E customer's bill. Customer will remit full payment to PG&E and PG&E will reallocate payments back to the ESP based on an allocation structure.

Consolidated ESP Billing. The customer receives both portions of its bill from the ESP in a single consolidated bill as long as the ESP has been authorized for this option. ESPs that select billing option Partial Consolidated ESP billing must be Electronic Data Interchange (EDI) capable, since financial charge (EDI 810) and payment (EDI 820) is transmitted to and from PG&E via EDI systems protocol. Customer will remit full payment to ESP and ESP will remit payment for PG&E transportation charges back to PG&E.

SEPARATE (DUAL)

BILLING PROCEDURES

The ESP may choose to provide a separate bill for ESP charges and have PG&E provide a bill for PG&E charges applicable to the customer. In this case, PG&E will provide the ESP with electric usage information for each customer via the EDI 867 process.

PG&E CONSOLIDATED BILLING – RATE READY

Under PG&E Consolidated Billing – Rate Ready, PG&E calculates and bills the customer for both PG&E charges and the ESP charges. The Utility will include a summary of the ESP's charges and any bill related details to the customer along with the PG&E charges.

Charges and fees associated with this billing option are specified in electric rate [Schedule E-ESP](#).

ESP RATE STRUCTURE

ESP must complete the [PG&E Consolidated Billing Pricing Worksheet](#) and select one or both of the following rate structures for each service account and provide PG&E with the Rate Schedule names and prices:

- i) a non-volumetric fixed price (lump sum) per day;
- ii) a single, per kW, volumetric rate.

Each submission of rate schedules by ESP should clearly identify which service accounts those schedules will apply to. PG&E requires the ESP to submit a Direct Access Service Request (DASR) to add or update a rate schedule for each service account.

The ESP's rate schedules and prices must be submitted to PG&E at least seven (7) business days prior to the effective day of the rate. This is done by submitting a PG&E Consolidated Billing Pricing Worksheet.

The ESP may update its rate schedules and prices no more than once per calendar month. The effective date of the rate must be either the same day of the month that PG&E changes its non-residential procurement rates (generally, the first day of a calendar month) or the fifth business day of the month. The pricing worksheet must be submitted by 8am Pacific Standard Time on the due date.

PAYMENT AND COLLECTION TERMS

PG&E is required to remit payments to the ESP only after the Customer's payment is received by PG&E. Payments will be transferred to the ESP specifying the amount paid by each specific service account per a payment allocation process. On the billing statement for the following month, PG&E will debit to the ESP any amounts resulting from returned payments and assess returned payment charges (i.e., a charge for each returned payment) to the appropriate Customers. Payments are due on or before the later of:

- i) 17 days after the bill was rendered to the Customer, or
- ii) the next business day after the payment is received from the customer

Any outstanding balance will be handled as a late payment. Disputed ESP charges must be directed to the ESP, and disputed PG&E charges must be directed to PG&E.

As described in electric [Rule 22](#), PG&E has an obligation to collect the unpaid balance of the ESP's charges, on ESP's behalf. PG&E will make an additional collection attempt by sending a letter to the customer informing them of their delinquent charges, and allowing an additional 30 days for any remitted payment to process before the delinquent charges are reversed back to the ESP for collection for closed accounts only. For customers who have switched to another ESP or to PG&E, PG&E will continue to collect the unpaid balance of the ESP's charges until full payment has been made to the ESP.

Furthermore, in accordance with Sections M.1.b of electric [Rule 22](#), if a residential customer makes a partial payment for a service account, assuming there are no delinquent charges, the partial payment will be allocated proportionally between PG&E's current charges and the ESP's current charges. If there are delinquent charges, then the partial payment would be allocated first to delinquent PG&E charges then to ESP's delinquent charges; any remaining balance would then be allocated towards current charges. Please note that Rule 22 M.1.b does not apply to commercial customers and the partial payment would be allocated proportionally between PG&E and ESP's charges.

In short, PG&E is responsible for collections of unpaid or late balances for ESPs who are using PG&E's consolidated billing option. ESPs are not allowed to collect from end-use non-residential customers unless customer's account has been reversed to ESP shown on the reversal report.

A Customer may dispute these charges, but will not otherwise have the right to direct partial payments for a particular service account. Utility Users Taxes will be treated in accordance with current utility procedures and are not subject to this section. PG&E will be responsible for the collection of the Utility Users Tax from the customer. The monies are then passed to the ESP who in turn are required to pay to the local tax authority (city or county).

In evaluating a delinquents residential service account for service termination and to the extent required by law or CPUC regulations, partial payments will be allocated first to delinquent charges that may result in discontinuance of service as specified in [Rule 11](#).

Undisputed overdue balances owed PG&E will be considered late and subject to PG&E late payment procedures pursuant to electric [Rule 8](#) and [Rule 11](#).

SERVICE DISCONNECTIONS AND RECONNECTION

PG&E will notify the Customer of PG&E's right to disconnect electric service for the non-payment of PG&E charges pursuant to electric [Rule 8](#) and [Rule 11](#). The Customer, and not PG&E, is responsible for contacting the ESP in the event it receives notice of late payment or service termination from PG&E for any of its service accounts. To the extent authorized by the CPUC, a service charge will be imposed on the Customer if a field call is performed to disconnect electric service.

PG&E will not disconnect electric service to the Customer for the non-payment of ESP charges. In the event of non-payment of ESP charges by the Customer, the ESP may submit a DASR requesting transfer of the service account to PG&E.

ESP CONSOLIDATED BILLING

Under ESP Consolidated Billing, the ESP bills the customer for both PG&E charges and the ESP's own charges. In this case, the ESP will receive each month, via EDI, a statement of each customer's PG&E charges along with usage information. The ESP remits to PG&E, via EDI, payments ascribed to each of these customer accounts.

CREDIT REQUIREMENTS

ESPs doing consolidated billing are subject to certain credit requirements, as described in [Rule 22, Section P](#).

PAYMENT

1. Customer bills issued to the ESP by PG&E via EDI are due and payable upon receipt. EDI payments must be remitted in accordance with the terms and conditions of the EDI Agreement. Any other payments must be remitted electronically or by wire transfer unless otherwise agreed to by PG&E.
2. Customer bills are considered past due if payment is not received within 15 calendar days following transmittal or receipt, as applicable. If a bill is not paid within this 15-day period, PG&E may issue a 7-day notice of nonpayment to the ESP, with a copy to the customer. Until payment is made, the ESP may not add customers.

If the bill continues to be unpaid, a 24-hour notice of nonpayment will be issued to the ESP. After this 24-hour period, PG&E may terminate the ESP Agreement without any further notice.

If PG&E issues a 24-hour notice, PG&E will also:

- a) Discontinue any billing arrangement, which allows the ESP to collect transportation charges from the customer.
 - b) Bill the ESP for any unpaid customer transportation charges.
 - c) Bill any subsequent transportation charges directly to the customer.
3. If the ESP pays late (i.e. past the 15-day period) three or more times by seven days or less, or pays late one or more times by greater than seven days in any consecutive 12-month period, the ESP will lose any good payment status it may have earned. PG&E may also elect to require collateral from the ESP. Additionally, if the ESP collects transportation charges on behalf of PG&E, the ESP will be required to establish an escrow account, and must grant PG&E a first priority security interest in all proceeds and accounts receivable in escrow. A third party will be required to receive accounts receivable and pay accounts payable on behalf of the ESP.
 4. The Customer is responsible for paying the PG&E transportation charges to the ESP. If an ESP pays PG&E transportation charges on behalf of a customer, and is subsequently not paid by the customer, the ESP may notify PG&E that the payment should be returned to the ESP. Such notification must be received by PG&E within 40 calendar days of the date the transportation charges were provided to the ESP by PG&E.

Upon such notification of nonpayment by the customer, PG&E will:

- a) Return those transportation charges paid by the ESP on behalf of the customer to the ESP.
 - b) Discontinue ESP consolidated billing for that customer.
 - c) Bill the unpaid transportation charges plus any late fees and any subsequent transportation charges directly to the customer for a minimum period of 12 months from the date of notification of non-payment.
5. If an ESP pays each bill in full within the allotted 15-day period following transmittal, the ESP's creditworthiness requirement will be reduced by two percent for every twelve (12) consecutive months of good payment history. This calculation is retroactive to the ESP's first day of participation in the electric aggregation service.

BILLING DISPUTES

If the end-use customer disputes a portion of a bill regarding ESP charges, the customer is still obligated to pay all PG&E transportation charges to the ESP or PG&E in a timely manner. The ESP may not withhold or delay payment of these charges to PG&E because of customer non-payment of ESP procurement charges.

If the ESP disputes any PG&E charge, the ESP may, in lieu of paying PG&E, deposit the disputed amount with the CPUC. No termination of the ESP Agreement will occur for this dispute while the CPUC is considering the matter if the full amount has been deposited with the

CPUC. If the ESP fails to deposit the full amount with the CPUC, PG&E may take all appropriate collection actions.

BILLING CREDITS FOR ESP CONSOLIDATED BILLING

Customers of ESPs that receive Consolidated ESP billing will receive a billing credit to their transportation rate (see electric rate [Schedule E-CREDIT](#) for details).

Reports

ESP PAYMENT REPORT

An automatic payment report is created and posted daily on an ESFT website upon receipt of payment from a customer for ESP charges. All ESPs will receive an email with login information to access the report. An example of this report and the data it contain is below.



ESPName_Payment
Report_Date

A file is also sent via EDI 820 to the ESP's bank who in turn notifies the ESP of payment remittance status.

ESP REVERSAL REPORT

Each month the ESP can download a file from the ESFT server which contains reversal data that the charges have been written off to the ESP's responsibility for collections. An example of what this report looks like and the information it contains is below.



Monthly Reversal
Report

ESP ADJUSTMENT REPORT

Each week the ESP can download a file from the ESFT server which contains adjustment data that was processed for that week. If there are no adjustments for the ESP, the file will not be generated. An example of what this report looks like and the information it contains is below.



ESP
Name_daily_esp_adj_

ESP SNAPSHOT REPORT

Each month the ESP can download a file from the ESFT server which contains all active customers and pending customers processing with or leaving the ESP. The ESP has 15 days from the day it's posted to retrieve the file. An example of what this report looks like and the information it contains is below.



ESPNAME current
customers as of YYYY

ESP BILLING REPORT

Each month the ESP can download a file from the ESFT server which contains the aging report that ESPs can use to reconcile their books against PG&E's data. The ESP has 15 days from the day it's posted to retrieve the file. An example of what this report looks like and the information it contains is below.



ESPNAME UDC-Gas
WFTB billing snapshot

EDI Data Transfer

Electronic Data Interchange (EDI) is the exchange of business data in a standardized format between business computer systems. EDI represents a fundamental change in the way companies transact business. It replaces paper-intensive functions with efficient electronic transactions and eliminates the need for printing and mailing business information. By using standard formats and languages, the computerized data can be electronically transmitted between two companies and interpreted automatically.

The process of sending data via EDI requires a series of steps on the part of the sending and receiving partners (known as Trading Partners). Once the foundation of your EDI message is defined, most of these steps will be either automated or procedures will be developed.

Pacific Electric and Electric Company presently utilizes a Value Added Network (VAN) for EDI Outbound 810 billing transactions. PG&E also has the ability to utilize EDI over Internet connectivity for EDI Outbound 810 billing transactions to Energy Service Providers.

The EDI contacts below can provide valuable guidance and advice. EDI Direct Access transaction sets are summarized below the contact table.

EDI contacts

Questions regarding EDI protocol or systems implementation requirements related to DES should be directed to the EDI Operations contact listed in Appendix A:

FOR MORE INFORMATION

For additional, detailed information on the EDI process, visit the EDI Web site (see Information Websites at the end of Chapter 1 in this handbook).

EDI Billing Transaction Sets

TRANSACTION SET 810 - BILLING

The 810 transaction set is used to provide established PG&E billing data in an electronic format to its customers. The billing data provided electronically reflects the same information that appears on a traditional paper bill and is consistent with national standards for EDI.

TRANSACTION SET 820 - PAYMENT AND REMITTANCE ORDER

The 820 transaction set is used to make a payment and send a remittance advice. This transaction set can be an order to a financial institution to make a payment to a payee. It can also be a remittance advice identifying the detail needed to perform cash application to the payee's accounts receivable system. PG&E's application requires that the 820 go through a financial institution.

TRANSACTION SET 248 – DAILY BILLING FILES

The 248 Transaction Set is used to provide PG&E billing data in an electronic format to ESPs. The billing data will communicate any adjustments that have been made for specific customers.

TRANSACTION SET 867 – METER USAGE

The 867 transaction set is used to transfer meter usage data from PG&E to the ESP.

TRANSACTION SET 997 - FUNCTIONAL ACKNOWLEDGEMENT

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

CHAPTER 6

METERING

Overview

This chapter primarily focuses on DA (Direct Access) interval metering including meter installation, meter maintenance obligations, Meter Data Management Agent requirements (including procedures for meter ownership), meter reading and meter data access.

Within the context of this chapter, the term “interval meter” refers to a meter capable of reading and storing electronic consumption data at specified time intervals of no greater than an hour.

Interval meters are required for DA customers whose electrical load is equal to or exceed fifty (50) kW, in four (4) or more of the last 12 months, or have a maximum load equal to or greater than eighty (80) kW in one or more month(s) in the last twelve (12) months. However, pursuant to Decision 10-03-022, customers with loads that are equal to or exceed fifty (50) kW in four (4) or more of the last twelve (12) months or have a maximum load equal to or greater than eighty (80) kW in one or more months in the last twelve (12) months, but less than two hundred (200) kW in ten (10) or more consecutive months in the last twelve (12) months may elect Direct Access service using load profiles until such time as PG&E completes its deployment of PG&E SmartMeters™ and is able to provide the required interval data. Until such time, an interval meter may be installed at the option of the customer and at their expense.

PG&E’s Rule 22, Direct Access Service, describes the terms and conditions that apply to both PG&E customers and Electric Energy Service Providers who participate in Direct Access. Fees for Direct Access services are described in PG&E Schedules E-DASR, E-ESP and E-EUS. Refer to PG&E’s Web Tariff Book (see Information Websites at the end of Chapter 1 in this handbook).

Metering Services

While PG&E is hopeful this chapter provides the reader with basic information regarding DA Metering in PG&E’s service territory, we also strongly suggest contacting your PG&E assigned ESP Services Representative to arrange a meeting to discuss your metering plans, along with procedures and processes.

METER SERVICE PROVIDER RESPONSIBILITIES

While CPUC decisions refer to meter service providers (MSPs), the industry currently identifies Meter Installers and Meter Maintainers. ESPs may select approved Meter Installers and Meter Maintainers, including PG&E, to perform interval meter installations and maintenance.

Responsibilities for Meter Installers and Meter Maintainers include:

- meter installation
- meter operation and maintenance services
- meter testing and certification

METER INSTALLATION STANDARDS

Meter installations will be conducted according to the requirements specified in DASMMD. PG&E shall have no liability for any damage or injury caused by ESP-installed metering equipment.

EFFECTIVE DIRECT ACCESS DATE

The effective date and time of the switch to direct access are the time and date of the installation, unless the account is DA Ready (see the “DA Ready Meter” section). If the account is DA Ready, the switch date is the next meter read date. Also see the “Meter Work Not Completed Within 60 Days” section under the heading, “Return to Bundled Service from Direct Access and Meter Ownership – Bundled Safe Harbor.”

METER MAINTENANCE

The Meter Maintainer is responsible for the routine maintenance of all DA interval meters, including but not limited to, DA interval meter testing, record keeping to assure safe and proper operation of the DA interval meter, and timely repair in accordance with PG&E's Direct Access tariffs, the DASMMD and other applicable standards.

METER EQUIPMENT SPECIFICATIONS

All meters installed by ESPs or their Meter Installers shall meet all CPUC-approved Direct Access Standards for Metering and Meter Data (DASMMD) and shall be self-certified by the meter manufacturer with the CPUC.

PG&E retains the right to replace an existing meter regardless of ownership if that meter fails to meet the requirements specified in DASMMMD. If PG&E replaces the meter, the installation terms, conditions and procedures below will apply:

- If the ESP does not elect to provide metering services, PG&E will provide those services at fees specified in PG&E's rate schedules to the DA customer.
- If PG&E removes the DA interval meter, PG&E will properly identify and return the meter to its owner in the same condition as found within 5 business days.

Obtaining Meter Equipment Information for Existing Customer Accounts

ESPs submit DASRs in accordance with guidelines provided in Chapters 2 and 3 of this handbook, "Processing Direct Access Service Requests." Those DASRs which either require or request meter installations become meter installation orders.

NOTE: No Direct Access metering services may be provided or started by an ESP, its Meter Installer or MDMA for any customer unless the ESP's DASR has been accepted by and the ESP's work has been scheduled with PG&E.

SELECTION OF THE METER INSTALLER

As described in the Meter Service Provider Responsibilities paragraph of this chapter, the ESP may select PG&E as its Meter Installer or Meter Maintainer or select another Meter Installer or Meter Maintainer to perform metering services. Those services include meter installation, meter operation, maintenance, testing and calibration. Generally the work also includes the removal of the existing meter.

PG&E metering services fees will be charged to the ESP in accordance with CPUC-filed tariffs. (See the filed document, E-ESP, located in the [Web Tariff Book](#).)

SCHEDULING METER REMOVALS AND INSTALLATIONS - PG&E AS METER INSTALLER

When PG&E is the meter installer, meter installation scheduling is based upon the following:

- Each DASR's renewable and non-renewable energy supply status
- PG&E's capacity to install meters which is dependent on its new construction volume, meter compliance, and meter data recovery work
- Date PG&E accepted the DASR on a first-come, first-served basis
- Site readiness
- Mutually agreed upon date

The ESP is responsible to ensure the meter site is ready for the meter installation. A meter site is considered ready when PG&E has ESP-provided meters on hand and the meter telecommunications are in place and working.

PG&E AS METER INSTALLER

If the site is DA Ready with an interval meter in place or PG&E, as Meter Installer, installs a customer- owned DA interval meter, the ESP is responsible for the meter cost, local sales tax, Service Base Charge, meter removal and installation charges and the programming and testing of the DA interval meter in accordance with the filed rate schedules. (See [PG&E's Web Tariff Book](#).)

METER SUPPLIED BY ESP

If PG&E, as Meter Installer, installs an ESP-provided DA interval meter, the ESP will be responsible for the Service Base Charge, the meter removal and the meter installation charges. Additionally, if the ESP has not performed meter programming and testing, PG&E will charge for that work in accordance with the provisions of PG&E's Direct Access Service Rule 22 and its filed rate schedules. (See [PG&E's Web Tariff Book](#).)

DA READY METER

A DA ready meter is an installed PG&E interval meter or a customer-owned meter that meets the CPUC's interim meter standards and is currently phone line read.

If an account has a PG&E DA ready meter, the ESP may elect to use this meter. Phone service account payment responsibility is described below in the paragraph entitled, "Responsibility - Phone Service Account Payment."

RE-SCHEDULING METER INSTALLATIONS

Site Not Ready. If at the time of the scheduled installation PG&E determines the site is not ready, PG&E will notify the ESP.

Metering Equipment Not Available. If at the time of the scheduled installation, the metering equipment (meter, cellular phone, etc.) is not on hand, PG&E will notify the ESP.

Other Operational Reasons. PG&E will notify the ESP of other operational reasons including, but not limited to, regulatory compliance work, restoration of service, emergency response, new business work load and meter repair and data recovery.

Scheduling Meter Removals and Installations - ESP as Meter Installer

The CPUC's dDecision 97-10-087, "Opinion Regarding Direct Access Implementation Plans and Related Tariffs ," requires the ESP to provide UDCs with 5 business days advance notice of its meter installations. As part of PG&E's implementation process of the CPUC requirement, ESPs are asked to submit install schedules no later than 3 working days prior to the scheduled date. The statewide accepted form can be found on the CPUC Web site and includes such data fields as:

- UDC order number
- Customer Account number
- Customer name
- Install Date
- XREF ID
- Install Time - if one of first 20 installations
- Meter Installer - if one of first 20 installations

When an installation does not occur on the scheduled date, the ESP or its designee will notify PG&E's Meter Event Group and advise PG&E of the status, i.e., new install date, on hold pending site access, telecommunications not in place, etc.

DETAILED WORK SCHEDULE - FIRST TWENTY INSTALLATIONS

In accordance with the CPUC's Decision 98-12-080 Regarding Permanent Standards for Metering and Meter Data, , a Meter Installer new to the PG&E service territory is required to provide PG&E with a schedule of its first 20 installations, including a description of all the procedures it will follow for removing and installing the meter, and what safety precautions it will take during those procedures. Additionally, PG&E will exercise its right to meet with the Meter Installer for the first 20 installations performed.

METER INSTALLATION/REMOVAL NOTIFICATION *

Within 3 business days of the meter removal and installation, the ESP shall return the MIRN (Meter Installation & Removal Notification) to PG&E.

RETURN OF PG&E METERS

Within 10 business days from meter removal, the ESP must return the meter to:

PG&E Gas & Electric Meter Plant
 ATTN: Electric Meter Supervisor
 42100 Boyce Road
 Fremont, CA 94538

Service Upgrades

PG&E highly recommends that ESPs advise their customers to contact the ESPs as soon as customers know a service upgrade is in the planning stage. Generally, if the transfer of load to the new service is a gradual one, a new agreement must be set up to maintain DA service. After a DASR is automatically generated, the ESP is notified through the DASR notification process.

The coordination of a phone line installation (if applicable) and meter install and removal prior to the service being energized is critical. Please also contact your assigned PG&E Meter Event Group (MEG) representative as soon as possible to ensure a smooth transition.

Return to Bundled Service from Direct Access and Meter Ownership

When a customer returns to bundled service from direct access and owns the interval meter, that meter may remain in service if:

The meter meets the CPUC's interval meter design specifications and is compatible with

- PG&E's meter reading systems.
- And the customer:
 - Grants PG&E rights acceptable to PG&E to access, test, maintain and read the interval meter at any time.
 - Pays any costs that PG&E incurs in providing metering services using the interval meter to the extent those costs exceed the costs that PG&E would incur using a standard PG&E meter for bundled service.
 - Agrees that PG&E may, at its discretion and at the customer's expense, replace the interval meter if it malfunctions with a standard PG&E meter for bundled service.

If the meter is not compatible with PG&E meter reading systems, the meter will be replaced at customer expense with a standard PG&E meter.

TRANSITIONAL BUNDLED SERVICE (TBS), ALSO KNOWN AS SAFE HARBOR

On May 8, 2003 the CPUC issued Decision D.03-05-034, the "Switching Order," in order to adopt rules to implement what is known as the "Switching Exemption." The new rules, implemented on February 19, 2004 are outlined as follows:

- A customer may return to Transitional Bundled Service (TBS) for a period of 60 days if the customer's intent is to find an ESP and continue on Direct Access Service. This period is also referred to as Transitional Bundled Service (TBS) or the "Safe Harbor" period. Customers selecting TBS will pay spot market rates for electricity as defined under Schedule TBCC, the Direct Access Cost Responsibility Surcharge (DA CRS), and be ineligible for any Revenue Cycle Service Credits during this time.
- A customer may return to Bundled Service by providing six months advance notice of their decision to the PG&E. During the six month advance notice period, the customer may remain with their current ESP, switch to another ESP or return at any time during that period to PG&E for electric commodity service. Once returned to Bundled Service, the customer will have to remain on Bundled Service for 18 months. The 18-month minimum Bundled Service Commitment is known as Bundled Portfolio Service (BPS).
- A customer returning to PG&E prior to the end of the six month advance notice period will pay for electricity under the terms described above for the TBS option for the remainder of the six-month advance notice period.

To summarize, if an ESP elects to discontinue service to a customer or a customer decides to contract with a different ESP for DA service, the customer enters TBS and then has 60 days to find a new ESP. If the customer does not find a new ESP within 60 days, it automatically

initiates a six-month advance notice of return where the customer will pay for electricity under spot market rates and applicable DA CRS for six months, then onto Bundled Portfolio Service for 18 months.

The following scenarios describe how customers may switch under the current guidelines.

- **Direct Access Switch to Transitional Bundled Service.** A DA customer returns to TBS while looking for a new ESP. Either the customer contacts PG&E to enter TBS or the ESP submits a Disconnect DASR, which automatically puts the customer in TBS for 60 days.
- **Direct Access Customer Gives Notice to Return to BPS.** A DA customer who is not in TBS wants to return to bundled service. The customer gives PG&E six-months advance notice and remains a DA customer. During the six-month advance notice period, the customer can continue to switch between ESPs. At month 5, PG&E generates a connect DASR for the account to return to BPS.
- **Direct Access Customer Requests Switch to BPS ASAP.** A DA customer who is not in TBS requests an immediate return to BPS. This initiates a six month notice period where the customer would pay spot market rates for electricity and the DA CRS, and at the conclusion of the six month advance notice period, the account switches per DA switching rules onto BPS for 18 months.
- **Transitional Bundled Service Defaults to Bundled Portfolio Service.** A DA customer enters TBS while looking for a new ESP. The customer is unable to find a new ESP to generate a connect DASR within the 60-day TBS period, the customer defaults to a six month advance notice period where they pay spot market rates for electricity and the DA CRS, and at the conclusion of the six month advance notice period, the account switches per DA switching rules onto BPS for 18 months.
- **Transitional Bundled Service Switch to Direct Access.** A new ESP submits a connect DASR for a customer in TBS. The account switches to DA per DA switching rules.
- **Transitional Bundled Service Customer Gives Notice to Return to BPS.** A DA customer switches to TBS to look for a new ESP. While in TBS, the customer decides to switch back to bundled service.
- This initiates a six month notice period where the customer would pay spot market rates for electricity and the DA CRS, and at the conclusion of the six month advance notice period, the account switches per DA switching rules onto BPS for 18 months.
- **ESP Wants Its Interval Meter Back.** When an account switches from DA to TBS, the ESP may contact PG&E to request that PG&E remove and return its interval meter at their expense. PG&E also contacts the ESP to determine whether or not the ESP wants its meter returned. PG&E then makes arrangements to return the meter to the ESP.
- **Required Meter Work Not Completed Within 60 Days.** If an interval meter is required for DA service, and the required meter work is not completed within 60 days of an account switch, PG&E contacts the ESP to find out if the ESP will complete the meter work. If the ESP has completed or will complete the meter work, PG&E updates its systems to record the meter work. If the ESP will not complete the meter work, PG&E schedules and performs the meter change at

the customer's expense. The account then switches to DA on the meter change date or the next read date (whichever occurs first).

ESP Inquiries

PG&E's Meter Event Group works with ESPs to ensure that metering inquiries described below are answered in a timely manner:

- Meter phone number
- Meter installations to include installation job forecasting
- Research on the status/tracking of meters
- Meter configuration data

For passwords, contact PG&E's Telemetry Support Center (TMSC) at 1-800-343-7013, Option 1. In situations where the ESP intends to use phone-read meter technology and/or selects PG&E as its MDMA, the ESP is responsible for:

- Establishing phone service
- Ensuring the phone service billing in its name
- Ensuring its telephone service provider installs a phone line for electric meter reading
- Or ensuring it provides PG&E with an activated cellular phone upon meter install

"Metering Phone Service Providers," Appendix A of this handbook includes the names and telephone numbers of providers within PG&E's service territory.

When PG&E is the ESP's MDMA the requirements below for wired phone lines and wireless phones apply.

WIRED PHONE LINE REQUIREMENTS

The phone line shall be a dedicated phone line. If this is not feasible, the ESP should contact ESP Relations to discuss other alternatives.

Additionally the phone line shall be:

- Installed from the phone minimum point of entry (MPOE) to the meter location. The ESP should be aware that in some instances, the ESP may be required by the customer or phone service provider to install a conduit, trench, or penetrate a fire wall in order to accommodate the installation.
- A "measured business" line with blocking on long distance, collect, 900, and 976 calls
- Installed in accordance with applicable codes and standards
- Labeled to show:
 - "For Electric Meter Use Only"
 - Telephone number
 - Maintenance and repair telephone number
 - Telephone service provider's name

For security reasons, a telephone network interface unit (NIU) shall be installed at the phone line termination point. A Joslyn telephone network interface model #7550, #7090 or equivalent should be used, following the requirements below.

Generally, the NIU should not be mounted on the switchboard, meter panels, poles or pedestals. If these are the only location choices, the mounting must be secure without compromising the safety aspects of the particular enclosure. In the case of pole mounted terminations, the NIU should be placed below the meter panel or otherwise not interfering with the pole climbing path.

The NIU should be installed within 5 circuit feet of the meter centerline and from a minimum of 18 inches to a maximum of 72 inches above finished grade. (A circuit foot is the length of wire or conduit that needs to be run along walls, etc., from the meter to the NIU. It is not a straight-line distance.)

WIRELESS PHONE INSTALLATION REQUIREMENTS

For situations in which it is not feasible for the telephone company to install a hardwired phone service, the ESP shall arrange for a cellular telemetry system to be installed and activated.

The cellular telemetry system shall meet the following specifications:

1. NEMA 3R weatherproof enclosure
 - a. Thermal shutoff protection
 - b. 5% to 95% relative humidity, non-condensing
 - c. Cellular radio with antenna connector
 - d. Capacity to operate in 120VAC, 50 watts maximum output power
 - e. User replaceable fuse
 - f. Transient and overcurrent protection for RJ11 connections
 - g. External ground lug
 - h. One RJ11 jack for data and one RJ45 jack for communications
 - i. Two wire, loop start
 - j. Ring voltage, 25Hz, 60 VRMs 150Vp-p
 - k. 350 Hz/440 Hz square wave dial tone
2. RJ45 jack for cellular handset programming and testing
3. The power supply for cellular telemetry system shall be outside any sealed section and on the load side of the meter. The power supply should further be on a dedicated circuit or otherwise connected so that it is energized at all times.
4. Mounting of the cellular telemetry system shall be the same requirement as the installation of NIU as described above.
5. The ESP shall ensure that any accessories to the cellular telemetry system, such as an antenna and a mounting bracket, are properly installed or attached.
6. The ESP shall have the system activated and functionally tested prior to notifying PG&E that the site is ready.
7. The cellular telemetry system unit shall be labeled to read, "For Electric Meter Use Only."
8. The unit shall be further labeled to show:
 - a. Telephone number
 - b. Maintenance and repair telephone number, and
 - c. Cellular telephone service provider's name

The ESP is responsible for the maintenance, repair and replacement of the cellular telemetry unit.

Responsibility - Phone Service Account Payment

If an active phone line exists for a PG&E interval data meter and the ESP chooses to remove the meter and install its own, PG&E will advise the phone service provider to cancel the account.

Or in those cases where the ESP is installing phone-read technology, PG&E will change billing from PG&E to the ESP. Some review of phone account responsibility may be required for those sites where PG&E uses the data for load research.

Responsibility - Phone Service Operability and Maintenance

When PG&E is the ESP's MDMA, the ESP is ultimately responsible for the on-going phone line operability.

The ESP must ensure that phone service is not turned off due to late or lack of payments to the phone service provider. Monthly payments should be made directly to the phone service provider.

Phone lines and phone ancillary devices used for remote meter reading are part of DA meters. Therefore, the ESP must make certain that the phone line and any ancillary devices are maintained as required. Any failure caused by phone line or phone ancillary devices shall be considered as meter failure and must be corrected as required in [Rule 22](#), Section G, Metering Services.

Retention of Rights

PG&E may exercise its right to test its own meters or those owned by customers in accordance with [Rule 22](#), Section G, paragraph 2.

Meter Data Management Agent (MDMA) Requirements

This section addresses the major systems responsibilities and requirements that Meter Data Management Agents (MDMAs) are required to perform. An MDMA is an entity that takes raw meter outputs, validates them using validation, editing, and estimating rules, adds corollary information needed to characterize the customer, and makes complete customer information available to others for use in various applications. As some of the rules and requirements for interval and monthly (template data) are different, the two usage types will be addressed separately.

MDMA responsibilities and requirements were established in decision 97-12-048 and the Retail Settlement and Information Flow (RSIF) Workshops. Decision and workshop reports are available for those interested in obtaining comprehensive information on MDMA responsibilities at the CPUC Web site.

MDMA Approval Process and Requirements

The CPUC Decision on the Meter and Data Communication Standards Workshop Report of December 3, 1997, directed the UDCs to develop a MDMA qualification/approval process for ESPs and MDMAs who wish to offer MDMA services.

The CPUC requires that potential MDMAs comply with current UDC standards in experience, education and training in order to perform the following functions of an MDMA:

- Manage the meter reading schedule
- Read and retrieve meter data
- Submit meter data to MDMA server using DES protocol
- Calculate usage
- Validate, edit and estimate meter data
- Format data
- Manage data on MDMA server
- Meter/device management

If the applicant is found to be compliant, the MDMA may immediately begin to serve accounts for which the ESP has identified the specific MDMA relationship through the submission of DASRs. Inception of MDMA service is also contingent upon the coordination between PG&E and the MDMA regarding read scheduling.

APPLICATION AND CHECKLIST

The potential MDMA must complete the Application for MDMA Approval and checklist which are available on the DA Documents link on the ESP Resource Center website at (see Information Websites at the end of Chapter 1 in this handbook). The name of the document is MDMA Qualification Instructions. The MDMA must forward the application and checklist per the specifications in the section below, Written Requirements.

WRITTEN REQUIREMENTS

The potential MDMA forwards the completed application, the checklist as well as all written requirements by mail or fax to:

Pacific Gas and Electric Company
Kathy Follan
P.O. Box 770000
Mail Code N8C
San Francisco, CA 941105

PG&E will review the submitted documentation of this test, determine if the potential MDMA is compliant with its standards and notify the MDMA via e-mail. PG&E has established a goal of 10 business days to review the documentation and respond to the potential MDMA. Omitted documentation of the submitted written requirements will result in PG&E requesting that additional information. If it is deemed after the UDC's review of the submitted written requirements that the potential MDMA's process is insufficient, the potential MDMA will fail the written requirements portion and will need to resubmit for qualification/approval.

SERVER ACCEPTANCE TEST

1. Subsequent to PG&E receiving the completed qualification documentation, the potential MDMA may contact PG&E to schedule the acceptance test.
2. PG&E will work with the applicant to ensure that it meets hardware and software requirements and will also send a sample test to the applicant prior to the test date.

3. PG&E will then provide the potential MDMA with data for the server acceptance test. The purpose of the server acceptance test is for the potential MDMA to demonstrate that it can calculate usage, validate, estimate and edit usage; format the usage in the Electronic Data Interchange (EDI) format; post the data to the potential MDMA's server; and provide the UDC with access to the server. Detailed steps are outlined in the MDMA Server Acceptance Testing document.
4. The acceptance test is then performed. The UDC's have established a 48 hour turn-around time requirement for the completion of this test.
5. If the potential MDMA fails the server acceptance test the first time, they can reschedule for re-test. However, if a failure occurs twice, the potential MDMA must wait three months before re-testing will be allowed.
6. In addition, re-testing will be required if new software is installed or if new technology is implemented by the potential MDMA and their use of the server.

BACK-UP READING PROCESS

If the potential MDMA's primary source of reading meters is a method other than the manual process, the potential MDMA, in addition to submitting documentation on its primary method must also demonstrate that it has a capable back-up process in place. Details of the backup process are also outlined on the checklist.

DATA FORMAT

MDMA data format requirements for each UDC is included with the application and checklist.

SECURITY AND CONFIDENTIALITY

Data security and confidentiality requirements are outlined in more detail by PG&E. However in general, data must be located in a secure facility and have firewall or equivalent protection.

HELP DESK

The CPUC decision requires that a technical help desk be provided by the UDCs as well as MDMA's. Each UDC must have toll free numbers available. The potential MDMA's must provide a technical support number as well. This phone must be answered immediately during normal business hours. However, after hour calls regarding the server must be returned within one hour. All other after hour calls can be deferred to the next business day.

Validating and Editing Data

The MDMA will be responsible for performing approved quality checks to the raw data retrieved from the meters as described in the CA VEE Rules. The quality checks include validating and editing the usage data. Upon completion of the validation and editing processes, an estimation will be performed on the data, if necessary. Data estimations are summarized in the subsequent section "Estimating Data". A comprehensive description of the rules for validating, editing, and estimating is also addressed within the CA VEE Rules document.

Below are the basic quality checks for interval and monthly data.

INTERVAL DATA

The interval data validations are summarized below. For a complete description of the rules, refer to the CA VEE Rules.

Spike Check. The highest interval recorded in a 24 hour calendar day cannot exceed the third highest interval for that day by more than 180%. When a spike is identified, the usage for that interval is flagged as missing and the estimation rules are used to fill the missing intervals.

High Low Average Daily Usage Check. An average daily total consumption is calculated from the current month's usage data and is compared to the average daily consumption calculated from the previous year's data for the same billing month, if last years data is not available. If the current month's average consumption is outside of plus or minus 50% of the historical average consumption, then the MDMA must verify the usage (i.e., re-polling, meter test, etc.). If the data is verified, the usage is flagged as verified and continues on the data flow path.

Sum Check. The energy use recorded by the meter is compared to the energy use recorded by the pulse recorder. If the difference is greater than two meter multipliers (constant used to convert meter read to KWh), the data must be verified by the MDMA (i.e., repolling, meter test, etc.). If the data is verified, the usage is flagged as verified and continues on the data flow path.

Hardware Checks. The MDMA must ensure that the polling device is synchronized to the national time standard before data collection begins. The MDMA must verify that the time difference in the meter device is within 180 seconds for a 30-day time period. An interval tolerance check comparing the number of expected data intervals to the number intervals received is performed to ensure the time drift is less than 5 intervals. See the CA VEE Rules for a complete description of how to correct the time drift.

Kilovolt-Ampere-Reactive hours (KVARH) Checks (if collected). If the kWh channel has zero consumption and for the corresponding time the kVARh channel has registered consumption, the kWh data must be treated as missing. The kWh data should be estimated using the estimation rules described in the CA VEE Rules.

Estimating Data

Following the validation and editing (flagging usage as missing) of the usage data, the estimation routines are performed to ensure that complete usage data will be provided for the given billing period. Where raw data is available with incomplete entries, the MDMA will estimate the data gaps using approved and documented algorithms. After performing the estimation the MDMA will be responsible for providing the usage to the UDC and ESP. The following are the estimation rules for interval data.

INTERVAL DATA ESTIMATION RULES

Greater than two continuous hours of missing interval data:

1. Compute the average daily profile by using the days from the current usage period and as much historical data (up to 90 days) as required to select three complete days (which were not estimated) corresponding to the day of week or holiday with

missing data. See the CA VEE Rules for additional details on how to select historical data when three complete days worth of data are not available.

2. If no historical holidays exist, use Sundays.
3. The historical data used should be that data immediately preceding the usage period, regardless of seasonal crossover.
4. Estimate the missing data by applying the appropriate average daily profile to fill the missing intervals.

Two hours or less of continuous missing interval data:

1. Use the point to point linear interpolation method to estimate the missing data where there is a gap in the data.
2. If the gap occurs at the beginning of the span, use the last interval from the historical data as the first point, if the historical data is available and the interval data is not estimated. Otherwise, use the second point (the nearest good interval data) as the first point (i.e., a flat load). If the gap occurs at the end of the span, use the first point as the second point (i.e., a flat load).

Accuracy and Timeliness of Usage Data

All usage data will be accurate unless otherwise indicated. Data known to be inaccurate or missing will be estimated and flagged as estimated data. The following accuracy and timeliness standards for interval and monthly data must be followed by MDMA's. The accuracy and timeliness requirements stated below were adopted by the CPUC in decision 97-12-048.

INTERVAL DATA

Accuracy. Either no more than 10% of the accounts will contain estimated data, or no more than 1% of all the data will be estimated.

Timeliness. Assuming that the meter read date is time zero:

- 80% of all usage data will be made available within 1 calendar day of the scheduled read date of the meter
- 90% of all usage data will be made available within 2 calendar days of the scheduled read date of the meter
- 99.99% of all usage data will be made available within 5 calendar days of the scheduled read date of the meter

MONTHLY DATA

Accuracy. Either no more than 10% of the accounts will contain estimated data, or no more than 1% of the data will be estimated.

Timeliness

- 85% of all the monthly meter reads will be made available by 6:00 am on the 1st working day after the scheduled meter read date.
- 95% of all the monthly meter reads will be made available by 6:00 am on the 2nd working day after the scheduled meter read date.

- 99.99% of all monthly meter reads will be made available by 6:00 am on the 5th working day after the scheduled meter read date.

Data retention period

On a monthly basis, the MDMA will provide interval data for the billing period in 27 to 33 measured usage intervals. The interval may or may not be equal to a twenty four hour period depending upon the meter read cycle and scheduling. Once the interval data or the monthly usage is posted to the MDMA server it will remain available for 3 business days. Upon request, this data will be available after the three-day business period. The MDMA must also store 36 months of historical consumption data.

INTERVAL AND TIME-OF-USE (TOU) DATA

Interval data, which represents regular interval energy usage information (i.e. 15 minute, hourly), is submitted via the DES in EDI 867 record format type.

Time-Of-Use data, which is characterized by consumption reads at different time periods, is also represented by using the DES in EDI 867 record format type.

Field definitions and requirements for the EDI 867 record format types are provided in the the EDI 867

Guidelines located at PG&E's EDI website <http://www.pge.com/edi> .

Meter Reading

METER READING DATA OBLIGATIONS

1. Meter data for DA Customers shall be read, validated, edited, and transferred pursuant to CPUC-approved standards.
2. Regardless of whether the ESP or PG&E perform Meter reading services, both PG&E and the ESP shall have access to the server containing the data, including at a minimum the following data:
 - a. Customer account number;
 - b. Customer location;
 - c. Starting and ending read, date and time if available;
 - d. Usage data (e.g.; kWh, kW, interval use, kVArh if measured);
 - e. Estimated usage and adjustment flag or adjustment code;
 - f. Meter identification number;
 - g. ESP identification number;
 - h. Identity of metering agent, if any, employed by ESP or PG&E;
 - i. Load Profile ID (if applicable);
3. PG&E and the ESP shall provide reasonable and timely access to Meter data to the ISO, Scheduling Coordinators (or their designated agents), and each other as required to allow the proper performance of billing, settlement, scheduling, forecasting and other functions.
4. Until future notice, load point information will need to be communicated manually.
5. The Party providing Meter reading services is required to keep the most recent 12 months of Customer consumption data for each DA Customer. Such data must be

retained for a period of 36 months. Such data must be released on request to any ESP, or to PG&E, if authorized by the Customer.

PG&E METER READING

1. PG&E will read DA interval meters for DA customers on PG&E's read schedule for each service account provided that the meter is compatible with PG&E's meter reading systems and processes. The ESP will be responsible for any meter reading costs for this service as set forth in DA Rule 22.
2. PG&E, or its metering and data management agent (MDMA), will be required to install and maintain a data server in accordance with standards approved by the CPUC.

ELECTRIC ESP METER READING

General Requirements.

1. No ESP may perform meter reading services for its own or any affiliated entity's use of DA Services.
2. No meter reading service may be provided by the ESP until that ESP has been approved by PG&E.
3. The ESP must keep PG&E notified at all times of the identity of the ESP's agent, if any, conducting Meter reading.

Schedule for ESP Meter reading. If the ESP or its agent perform meter reading, it must do so on PG&E's meter read schedule for that service account as specified by PG&E, unless a different schedule is mutually agreed to by PG&E and ESP.

Metered Usage Rates

Metered usage rates are determined by end-use customers' electric rate schedules. Electric rate schedule information is available on [PG&E's Web Tariff Book Web site](#).

Life Support Customers and Medical Baseline Quantities

Life Support customers are residential end-use customers who have a medical disability necessitating the use of a medical device(s) powered by utility supplied gas and/or electricity. These customers may qualify for a Standard Medical Baseline Quantity in addition to their regular baseline quantity (i.e., gas and/or electricity at the lowest Tier 1 residential rate). The Standard Medical Baseline Quantity is 500 kWh of electricity and/or 25 therms of gas per month year-round.

Additional amounts of gas and electricity (Medical Baseline Quantities) are available at the Tier 1 rate to customers when a full-time member of the household is:

- dependent upon a medical life-support device used in the home.
 - a paraplegic, hemiplegic, or quadriplegic person or a multiple sclerosis patient with special heating and/or cooling needs.

- a person being treated for a life-threatening illness or a person with a compromised immune system with special heating and/or cooling needs to sustain the life of the person or prevent deterioration of the person's medical condition.
- a scleroderma patient with special heating needs.

ESPs who have identified end-use customers which require Standard and/or additional Medical Baseline Quantities should refer to Electric Rule 14 for information concerning commodity service continuity and Rule 19 for details on end-use customer qualifications. These rules can be found within [PG&E's Web Tariff Book](#).

For information on additional DASR requirements when submitting DASRs for Life Support customers, see the subsection, "Electric ESP evaluates customer DA elections and obtains customer information" in Chapter 3: Processing Direct Access Service Requests.

APPENDIX A

CONTACTS

FUNCTIONAL CATEGORY	CONTACT	FUNCTIONAL SERVICE AREAS	PHONE NUMBER/EMAIL
DIRECT ACCESS OPERATIONS	KATHY FOLLAN	THIRD PARTY RELATIONS, ESP ACCOUNT MANAGER, EXPERT	(415) 973-6479 KMF1@PGE.COM
	DAVID GUTIERREZ	THIRD PARTY RELATIONS, MANAGER	(415) 515-3382 D1G9@PGE.COM
	HISTORIC USAGE INFORMATION	REQUEST FOR HISTORIC USAGE INFORMATION	ESP SERVICES CISR@PGE.COM
SPECIAL BILLING OPERATIONS	TANISHA ROBINSON	SUPERVISOR, SPECIAL BILLING & EDI OPERATIONS	(415) 973-2395 TXR9@PGE.COM
	DAVID REYES	ESP CONSOLIDATED BILLING ESP PAYMENTS RECONCILIATION ESP WRITE-OFF REPORTS ESP DAILY PAYMENT REPORTS	(415) 973-2022 DPR8@PGE.COM
	TYSHENNA WILLIAMS	PG&E CONSOLIDATED BILLING NEW ESP ACCOUNT SETUP ESP DAILY BILLING REPORTS ESP NON-ENERGY BILLS ESP IMBALANCE STATEMENTS BILLING RECONCILIATION & METER USAGE DATA SUPPORT	(916) 760-9803 T1ME@PGE.COM

ELECTRONIC DATA INTERCHANGE (EDI) OPERATIONS	TANISHA ROBINSON	SUPERVISOR, SPECIAL BILLING & EDI OPERATIONS	(415) 973-2395 TXR9@PGE.COM
	TYSHENNA WILLIAMS	EDI OPERATIONS, BUSINESS ANALYST CUSTOMER SWITCHING – DASRS PG&E CONSOLIDATED BILLING METER USAGE DATA	(916) 760-9803 EDISUPPORT@PGE.COM
	KHOUA MOUA	EDI OPERATIONS, INFORMATION SYSTEMS ANALYST EDI TESTING & NEW ACCOUNT SETUP EDI & DASR SUPPORT PG&E CONSOLIDATED BILLING SUPPORT METER USAGE DATA SUPPORT	(415) 973-6693 EDISUPPORT@PGE.COM
ENERGY DATA SERVICE	MARY TAWASHA	DATA ANALYST	(415) 973-7811 MLL4@PGE.COM
	RYAN WONG	DATA ANALYST	(415) 973-0113 R2WJ@PGE.COM
Meter Events Group	SOFIA VALLEZ	METERING SERVICES	(415) 973-6952 SXV0@PGE.COM
	STEVEN LY	METERING SERVICES	(415) 973-0189 S2LS@PGE.COM