



Electronic Data Interchange Implementation Guide

TRANSACTION SET

814

Version 4010

LAST REVISED December 15, 2020

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	Summary of Changes
July 30, 1999	Initial Release 814 v.4010.
December 1, 1999	Contact information updated (pg. 5).
December 17, 1999	Added Interchange Control Structure segments (envelope data): ISA, GS, GE, and IEA.
January 12, 2000	Changed PG&E Company Contact
January 26, 2000	Changed Seg N1, Data Element 98, Name 8R Note (Page 22)
March 24, 2000	Added REF section in Header
May 10, 2000	Corrected segment lengths, pages 5, 10, 20 and 33
September 28, 2000	Modified the REF section, the reject reason codes on page 37
January 17, 2001	Modified the ASI section, add action code 27 on page 30 and add action code 24 cancel on page 31. Modified REF section, add 1P/AB/CUSTMV on page 36
September 20, 2001	Modified the LIN section, added GAS, Gas Service on page 28. Modified the Note section, on page 33.
December 4, 2002	Modified the REF section on page 32. Changed verbiage in REF01 – 06, Page 33 change GENID, To XREF.
January 14, 2003	Modified the REF – Notes, also changed verbiage to REF 01-06 and REF 01-12, on page 32. Modified 76-A76 verbiage on page 36. Modified verbiage in REF 06 and REF 12 on page 38. Modified verbiage REF 03-352 changed to account reference on page 43.
October 28, 2003	Updated REF TZ to indicate alpha character, not numeric on pages 43-44.
September 2, 2005	Updated BGN02 segment for minimum/maximum 16 character requirement.
December 15, 2021	Updated guide to reflect all current 814 segments as of Dec 2020

PACIFIC GAS AND ELECTRIC SET-UP AND CONTACT INFORMATION
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Internet Server File Naming:

Inbound File From ESP→LDC: ESP Short_Name+CCYY,MM,DD,HH,MM,SS
Example epmi.19990729123400

Outbound File From LDC→ESP: ESP Short_Name+CCYY,MM,DD,HH,MM,SS
Example epmi.19990730120500

Pacific Gas and Electric Communication ID:

(ISA Sender ID)

ESP's Dun's Number

Communications ID Qualifier:

(ISA Sender ID Qualifier)

01

ISA Example (ESP→LDC): ISA| 00 | | 00 | | 01 | 123456789 | 01 | 006912877 | 990803 | 1350 | U | 00401 | 000000123 | 0 | P | ~^a

- Outbound Data Element Delimiter | (Hex Value 6A)
- Outbound Data Segment Terminator ^a (Hex Value 5F)
- Outbound Data SubElement Separator ~ (Hex Value A1)

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<p>PG&E utilizes ANSI X12 version 004010 following the Utility Industry Guideline (UIG) for 004010. This document is subject to change based upon future UIG approved standards and regulatory mandates.</p>

814 General Request, Response or Confirmation

Introduction

This document is a subset of a Utility Industry Group (UIG) Implementation Guideline, which contains the format and establishes the data contents of the Electronic Data Interchange (EDI) General Request, Response or Confirmation Transaction Set (814). This standard can be used to request actions to be performed, to respond to a request for actions to be performed, or to confirm information related to actions performed for or on behalf of Customers. The complete UIG guideline provides additional details on EDI usage.

This document represents current usage of transaction set 814 by California utilities and is intended to promote a consistent implementation of EDI within the State of California. EDI components appearing in this guide should be accepted by the transaction receiver even if the receiver does not make use of the information, whereas designation of a component as mandatory, conditional, or optional for a trading partner indicates that the information will be used. Changes should be made to this guide when changes occur to UIG's implementation guideline, when additional features of UIG's implementation guideline come into use by California utilities, or when the status of utilities' use of the EDI elements changes.

Purpose

This Utility Industry Group (UIG) Implementation Guideline contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) as adopted by the UIG for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed, or to confirm information related to actions performed for or on behalf of Customers.

Notes

This Implementation Guideline was designed to address the business processes that support the supply of products or services by a third party, such as bill presentment or payment services, warranty services, or alternative energy supply. The primary processes addressed by this Transaction Set 814 are the customer request for enrollment with a third party supplier, the maintenance of customer account information, and the dis-enrollment from the third party supplier.

The principal parties involved in this Transaction Set 814 implementation are:

- The end-use customer (Code 8R)
- The entity which provides services to the customer on behalf of another entity (Code 8S), the Utility
- The entity which has the primary business relationship with the customer (Code SJ), the Energy Service Provider (ESP)

When this transaction set is used in an alternative energy supply environment, Code 8S identifies the local distribution utility (LDC or LDC) and Code SJ identifies the alternative energy service provider (ESP).

814 General Request, Response or Confirmation

Best Practices

Global Best Practices

997 - Functional Acknowledgment

- The purpose of the 997 is to verify receipt of a transmitted document only, not the acceptance of the document content. A 997 will be returned to the sender per 814 transaction set, which will indicate compliance with ANSI-X12 validation.

Interchange Control Number

- A unique and sequential interchange control number should be used on every envelope that is transmitted to a trading partner. This approach will allow the receiver to audit the interchange for any duplicate or missing transmissions. For testing PG&E recommends using a "T" - Test in ISA15.

Use of Dun & Bradstreet (DUNS) Number

- Dun & Bradstreet assigns a nine-digit identification number to every business entity. This number, known as the DUNS number, should be used to identify the trading partners.

Capitalization

- The use of all upper case (capital) letters is mandatory.

Time Value

- PG&E transmits all information using the international standard, Universal Coordinate Time (UTC). UTC, for the purposes of this document, is simply the Greenwich Mean Time (GMT) without daylight savings time correction. UTC is an internationally recognized time representation and is actually used in nearly all of our modern computer systems, including desktop PCs.
- Meter readings, administrative operations, and billing transactions are all reported in UTC. Some account billing is based upon time-of-day which is normally defined in terms of local time. For those accounts, conversion from UTC to local time must be performed.
- Differences from UTC to PST is 8 hours, i.e. (480 minutes). PG&E's service territory local time is based on Pacific Standard Time (PST). The California LDC's have decided not to indicate a specific code in the 814 transaction set.

Transaction Set File Level

- FOLDER LEVEL: Multiple transaction sets can be sent per folder (i.e. 867, 814, 810).
- FILE LEVEL: PG&E recommends one transaction set type (i.e. 814) per file. In other words, each file will contain a maximum of one transaction set type.

Global Best Practices con't

Valid Data

- PG&E will reject transaction sets that are not ANSI - X12 compliant.
- PG&E will ignore codes and data content which are not explicitly stated in our 814 Implementation Guide.

Document-Specific Best Practices

General Use

- All items marked with this symbol (>>) are required fields.
- All items marked with "R" are Recommended fields.
- All files should be transaction specific (i.e. one file for 814 transactions and a separate file for other transactions.)

Use of the N1 Loop

- If any one entity performs more than one of the business functions provided in the N1, the loop should be repeated as necessary to identify that entity as the provider of those functions.
- For Account Maintenance transactions when there is a change in the service address and a Third-Party Customer exists (i.e. one other than the end-use Customer), this will be represented by code BT in N101.
- Account Maintenance transactions require a mailing address because the service address zip code is used for validation.

Use of The LIN Segment

- If multiple Consumers are addressed in one 814, a separate LIN loop should be used for each Consumer; i.e., one LIN per Consumer, one Consumer per LIN. When Responding to a Request transaction, the best practice is to identify the LIN segments (LIN01) with the same identification sent in the Request LIN01.
- The UIG recommends that one 814 be limited to one service account for a single commodity (electric or gas). This single service account may have more than one meter associated with it, in which case a separate NM1 loop should be used for each meter. The LIN loop contains data relative to a service associated with the service account; e.g., enrollment with an ESP, sign-up for budget billing, sign-up for direct debit, etc. When Responding to a Request transaction, the best practice is to identify the LIN segments (LIN01) with the same identification sent in the Request LIN01.

Use of the Detail LIN/REF Segment

- Three conventions for the Detail LIN/REF segment (position 030) are provided in this implementation guideline, any or all may be used in one transaction:
- One to convey status reason codes in response to a Request
- One to convey change reason codes in a Request for account maintenance
- One to convey account level reference information
- To allow for multiple rejection reasons when a Request is rejected, the UIG convention is to transmit the status reasons in the LIN/REF segment (position 030) rather than in the ASI03 element, even if there is only one rejection reason. The codes used in REF02 will be those specified for ASI03; i.e. codes from data element 641.
- The codes used in REF02 when the segment is used for account maintenance and/or update are maintained by the UIG. The first portion of the code identifies the segment that contains the data that has been changed; the remaining portion of the code identifies the relevant code qualifier for the data that has been changed. The changed data will appear in the appropriate element of the identified segment.

Definitions for Data Elements 128 (REF01), 306 (ASI01), and 875 (ASI02)

- To accommodate the identification requirements necessitated by the restructuring of the electric utility industry, the UIG has developed its own definitions for the qualifiers and codes found in data elements 128, 306, and 875.

Acceptance or Rejection at the Account Level

- The UIG recommends that acceptance or rejection of a request should always be done at the account level. The REF02 codes shown with the REF01 of '7G' at Position 030 in the Detail are provided for that purpose. The codes shown with the REF01 of '7G' at Position 130 of the Detail are provided for the sender to send additional, meter-level information about the error. Sending information error at the meter level is optional; however, rejecting at the meter level can lead to splitting accounts. (See Examples in 814 Tutorial.)

Update Transaction

The Update Transaction is initiated by either the LDC, current ESP, or the pending ESP and is used to communicate changes to service provider / entity relationships

The following fields are updated via the UPDATE Transaction:

- MDMA (Meter Agent)
- MSP (Meter Installer)
- Meter Owner
- Meter Maintainer
- Biller
- Bill Calculator
- Requested start date
- Scheduled start date
- Meter Investigation Status
- Billing Options
- Usage Calculation Code (Meter Request Indicator)
- Meter Type Requested (Interval or Load Profile)

[Note: Meter investigation status, Usage calculation code, and Meter type requested are necessary for the switching logic involved. Thus, they are included in the Update transaction.]

Each Update Transaction is to include only those relationships / providers that are changing. The accepted UPDATE Transaction Response will confirm only those requested items with one status and one start date for all relationships.

Account Maintenance Transactions

The Account Maintenance transaction is used to change non-relationship related DASR information, i.e. Customer Name, Billing Address, Meter Number, etc. This Transaction can be initiated from the LDC, current ESP, or pending ESP. The Account Maintenance transaction does not require the other party to make a change. Any Account Maintenance information received from an ESP by PG&E, except that which are explicitly stated below, will be ignored. For a List or Account Maintenance fields, see CA. Data Dictionary.

The following is a list of Acct Maintenance Transactions for which PG&E accept changes:

- ESP Customer Service Account #)
- ESP Rate Schedule

**TABLE 1
CMEP TO EDI TRANSLATION**

CMEP Terms	EDI Terms	Initiated By	Trans. ID	BGN	ASI01	ASI02
SP-REQ/CONNECT	Request/Connect	ESP	1.1	13	7	021
SP-ACK/CONNECT	Response/Connect - Accept	LDC	1.4	11	WQ	021
SP-NAK/CONNECT	Response/Connect - Reject	LDC	1.6	11	U	021
ACK/CONNECT (for new account only)	Response/Connect - Pend	LDC	1.3	11	A4	021
SP-REQ/DISCONNECT	Request/Disconnect	ESP	2.1	13	7	002
SP-ACK/DISCONNECT	Response/Disconnect - Accept	LDC	2.4	11	WQ	002
SP-NAK/DISCONNECT	Response/Disconnect - Reject	LDC	2.5	11	U	002
CFG/CONNECT	Completion Notification/Connect	LDC	1.7	CN	F	021
CFG/DISCONNECT	Completion Notification /Disconnect	LDC	1.8	CN	F	002
SVC/DISCONNECT	Notification/Disconnect	LDC	9.1	14	7	002
SP-REQ/UPDATE (pending relationship)	Request/Update	ESP	4.1	13	7	001
SP-ACK/UPDATE (pending relationship)	Response/Update - Accept	LDC	4.3	11	WQ	001
SP-NAK/UPDATE (pending relationship)	Response/Update - Reject	LDC	4.5	11	U	001
CFG/UPDATE (Prior Disconnect Notice - Former Departing)	Advance Notification/Disconnect	LDC	1.5	14	7	002
CFG/UPDATE (Pending Connect)	Advance Notification/Connect	LDC	4.4	14	WQ	021
SP-REQ/UPDATE (existing relationship)	Request/Update	ESP	5.1	13	7	001
SP-ACK/UPDATE (existing relationship)	Response/Update – Accept	LDC	5.3	11	WQ	001
SP-NAK/UPDATE (existing relationship)	Response/Update – Reject	LDC	5.4	11	U	001
CFG/UPDATE (existing relationship)	Completion Notification/Connect	LDC	5.5	CN	F	001
SP-REQ/MAINT	Request/Account Maintenance	ESP	6.1	14	7	022
SP-ACK/MAINT	Response/Account Maintenance - Accept	LDC	6.3	11	WQ	022
SP-NAK/MAINT	Response/Account Maintenance - Reject	LDC	6.5	11	U	022
CFG/MAINT	Notification/Account Maintenance	LDC	8.1	14	WQ	022
CFG/UPDATE	Notification/Update	LDC		14	7	001

814 General Request, Response or Confirmation

Functional Group ID=**GE**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

Interchange Control Header:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
15	010	ISA	Interchange Control Header	M	1		
17	020	GS	Functional Group Header	M	1		

Header:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
19	010	ST	Transaction Set Header	M	1		
20	020	BGN	Beginning Segment	M	1		
						LOOP ID - N1	>1
22	040	N1	Name	O	1		n1
24	050	N2	Additional Name Information	O	2		
25	060	N3	Address Information	O	2		
26	070	N4	Geographic Location	M	1		
27	080	PER	Administrative Communications Contact	O	>1		
28	090	REF	Reference Identification	O	>1		

Detail:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
						LOOP ID - LIN	>1
29	010	LIN	Item Identification	O	1		
31	020	ASI	Action or Status Indicator	O	1		
33	030	REF	Reference Identification	O	>1		
41	040	DTM	Date/Time Reference	O	>1		
						LOOP ID - NM1	>1
42	080	NM1	Individual or Organizational Name	O	1		n2
43	130	REF	Reference Identification	O	>1		

Summary:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
49	150	SE	Transaction Set Trailer	M	1		

Interchange Control Trailer:

<u>Page No.</u>	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
50	030	GE	Functional Group Trailer	M	1		
51	040	IEA	Interchange Control Trailer	M	1		

Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.
2. The NM1 loop is used to identify the parties associated with the individual line item (LIN), such as an individual consumer in a consolidated third party Consumer Service Provider transaction.

Segment: **ISA** Interchange Control Header
Position: 010
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Syntax Notes:
Semantic Notes:

Comments:
Notes:

Ex: ISA|00||00||01|043000261|ZZ|00691287702B|991015|0823|U|00401|000000333|0|P^a

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ISA01	I01	Authorization Information Qualifier Code to identify the type of information in the Authorization Information 00 No Authorization Information Present (No Meaningful Information in I02)	M ID 2/2
M	ISA02	I02	Authorization Information Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M AN 10/10
M	ISA03	I03	Security Information Qualifier Code to identify the type of information in the Security Information 00 No Security Information Present (No Meaningful Information in I04)	M ID 2/2
M	ISA04	I04	Security Information This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M AN 10/10
M	ISA05	I05	Interchange ID Qualifier Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified 01 Duns (Dun & Bradstreet)	M ID 2/2
M	ISA06	I06	Interchange Sender ID Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M AN 15/15
M	ISA07	I05	Interchange ID Qualifier Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified ZZ Mutually Defined	M ID 2/2
M	ISA08	I07	Interchange Receiver ID Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them	M AN 15/15
M	ISA09	I08	Interchange Date Date of the interchange	M DT 6/6

M	ISA10	I09	Interchange Time Time of the interchange	M TM4/4
M	ISA11	I10	Interchange Control Standards Identifier Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
M	ISA12	I11	Interchange Control Version Number This version number covers the interchange control segments 00303 Draft Standard for Trial Use Approved for Publication by ASC X12 Procedures Review Board Through October 1992 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	M ID 5/5
M	ISA13	I12	Interchange Control Number A control number assigned by the interchange sender	M N0 9/9
M	ISA14	I13	Acknowledgment Requested Code sent by the sender to request an interchange acknowledgment (TA1) 0 No Acknowledgment Requested	M ID 1/1
M	ISA15	I14	Usage Indicator Code to indicate whether data enclosed by this interchange envelope is test, production or information Refer to 004010 Data Element Dictionary for acceptable code values.	M ID 1/1
M	ISA16	I15	Component Element Separator Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	M AN 1/1

Segment:	GS Functional Group Header
Position:	020
Loop:	
Level:	
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of a functional group and to provide control information
Syntax Notes:	
Semantic Notes:	<ol style="list-style-type: none"> 1 GS04 is the group date. 2 GS05 is the group time. 3 The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.
Comments:	<ol style="list-style-type: none"> 1 A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer.
Notes:	Ex: GS IN 045000234 0069 1287702B 990715 130510 123 X 004010 ^a

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	GS01	479	Functional Identifier Code Code identifying a group of application related transaction sets FA Functional Acknowledgement (997) GE General Request, Response or Confirmation (814) IN Invoice Information (810,819) MO Maintenance Service Order (650) PT Product Transfer and Resale Report (867) RA Payment Order/Remittance Advice (820)	M ID 2/2
M	GS02	142	Application Sender's Code Code identifying party sending transmission; codes agreed to by trading partners	M AN 2/15
M	GS03	124	Application Receiver's Code Code identifying party receiving transmission; codes agreed to by trading partners	M AN 2/15
M	GS04	373	Date Date expressed as CCYYMMDD	M DT 8/8
M	GS05	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M TM 4/8
M	GS06	28	Group Control Number Assigned number originated and maintained by the sender	M N0 1/9
M	GS07	455	Responsible Agency Code Code used in conjunction with Data Element 480 to identify the issuer of the standard X Accredited Standards Committee X12	M ID 1/2
M	GS08	480	Version / Release / Industry Identifier Code Code indicating the version, release, sub-release, and industry identifier of the	M AN 1/12

EDI standard being used, including the GS and GE segments; if code in

DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and sub-release, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

003030	Draft Standards Approved for Publication by ASC X12 Procedures Review Board Through October 1992
004010	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:
Notes: Ex: ST|814|Originator's Transaction Set ID^a

Data Element Summary

Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 814 General Request, Response or Confirmation M ID 3/3
>>	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set M AN 4/9

Segment: **BGN** Beginning Segment
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of a transaction set
Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
Semantic Notes: 1 BGN02 is the transaction set reference number.
 2 BGN03 is the transaction set date.
 3 BGN04 is the transaction set time.
 4 BGN05 is the transaction set time qualifier.
 5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.

Comments:
Notes:

Ex:
 BGN|13|ESP Record ID|19990815|234719^a (Connect Request – SP-REQ)
 BGN|11|PG&ERecord ID|19990820|201532^a (Connect Reject – SP-NAK)
 BGN|11|PG&ERecord ID|19990820|215810^a (Connect Accept – SP-ACK)

Data Element Summary

Ref.	Data Element	Name	Attributes
>>	BGN01	Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
		11 Response Response to a previous request. This code is used as a response to a request transaction (i.e. Connect or Disconnect). CMEP-equivalent: SP-ACK, SP-NAK	
		13 Request Request for information or action. This code is used for a request (i.e. Connect, Disconnect, or Update). CMEP-equivalent: SP-REQ	
		14 Advance Notification Notice of change. This code is used for notification purposes (i.e. ESP or LDC-generated Account Maintenance transaction). CMEP-equivalent: SP-REQ MAINTENANCE, CFG-MAINTENANCE, CFG-UPDATE, SVC/DISCONNECT	
		CN Completion Notification Signifies that the order is complete and the information contained within is final for the service request purchase order. CMEP-equivalent: CFG-CONNECT, CFG-DISCONNECT	
>>	BGN02	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 16/16

			<p>A unique transaction identification number assigned by the originator of this transaction. This number should be unique over time. If used, this will be the same in response transaction (i.e. BGN06). This is the Energy Service Provider (ESP) Record ID such as in the Connect Request transaction.</p>																
>>	BGN03	373	<p>Date M DT 8/8 Date expressed as CCYYMMDD The transaction creation date. This is the date that the transaction was created.</p>																
R	BGN04	337	<p>Time X TM4/8 Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) The transaction creation time. This is the time that the transaction was created. Recommended for PG&E.</p>																
	BGN05	623	<p>Time Code O ID 2/2 Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow Identifies the time zone applicable to the BGN04 value. Not recommended for PG&E.</p> <table border="0" style="margin-left: 40px;"> <tr><td>AT</td><td>Alaska Time</td></tr> <tr><td>CT</td><td>Central Time</td></tr> <tr><td>ET</td><td>Eastern Time</td></tr> <tr><td>GM</td><td>Greenwich Mean Time</td></tr> <tr><td>HT</td><td>Hawaii-Aleutian Time</td></tr> <tr><td>MT</td><td>Mountain Time</td></tr> <tr><td>PT</td><td>Pacific Time</td></tr> <tr><td>UT</td><td>Universal Time Coordinate</td></tr> </table>	AT	Alaska Time	CT	Central Time	ET	Eastern Time	GM	Greenwich Mean Time	HT	Hawaii-Aleutian Time	MT	Mountain Time	PT	Pacific Time	UT	Universal Time Coordinate
AT	Alaska Time																		
CT	Central Time																		
ET	Eastern Time																		
GM	Greenwich Mean Time																		
HT	Hawaii-Aleutian Time																		
MT	Mountain Time																		
PT	Pacific Time																		
UT	Universal Time Coordinate																		
	BGN06	127	<p>Reference Identification O AN 1/16 Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier If used, refers to the BGN02 identification number of the original request.</p>																

Segment:	N1 Name
Position:	040
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	<ol style="list-style-type: none"> 1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	<ol style="list-style-type: none"> 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. 2 N105 and N106 further define the type of entity in N101. 3 For Account Maintenance transactions, when N101=8R, then N102="New" Customer Name 4 When N101=8R or BT, then N103, N104, and N106 are not required. (i.e. when N101=8R or BT, the name is represented: N102)
Notes:	<p>Ex:</p> <p>N1 SJ 1 ESP DUNS# 41^a (Connect Request – SP-REQ)</p> <p>N1 8S 1 006912744 41^a (Connect Reject & Connect Accept – SP-NAK & SP-ACK)</p>

Data Element Summary

Ref.	Data Element	Name	Attributes
>>	N101	98 Entity Identifier Code	1 M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		8R Consumer Service Provider (CSP) Customer	This is the Customer. Required for all request transactions.
		8S Consumer Service Provider (CSP)	This is the Utility (LDC).
		SJ Service Provider	Identifies name and address information as pertaining to a service provider for which billing is being rendered This is the Energy Service Provider (ESP).
		90 Previous Business Partner	This is the Former/Departing ESP.
		BT Bill-to-Party	This is a Third Party Customer. (Only used for Account Maintenance transactions when there is a change in the service address.)
	N102	93 Name	X AN 1/60
		Free-form name	
		When N101=8R or BT, then Name is represented in the format: First_Middle_Last	

N103	66	Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		When N101=8R or BT, this field is not required.	
N104	67	Identification Code	X AN 2/80
		Code identifying a party or other code	
		Sender or Receiver ID – DUNS #	
		PG&E will identify up to 12 characters.	
		When N101=8R or BT, this field is not required.	
N106	98	Entity Identifier Code	O ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops.	
		When N101=8R or BT, this field is not required.	
		40 Receiver	
		Entity to accept transmission	
		41 Submitter	
		Entity transmitting transaction set	

Segment: N2 Additional Name Information
Position: 050
Loop: N1
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify additional names or those longer than 60 characters in length
Syntax Notes:
Semantic Notes:
Comments: 1 When N101=8R, then N2 segment is required. PG&E does not use this segment.
 2 When N101=BT, then N201 is not used.
Notes: Not used

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	
>> N201	93	Name Free-form name	M AN 1/60
N202	93	Name Free-form name	O AN 1/60

Segment:	N3 Address Information
Position:	060
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	2
Purpose:	To specify the location of the named party
Syntax Notes:	
Semantic Notes:	
Comments:	<ol style="list-style-type: none"> 1 When N101=8R, this is the customer service address. 2 When N101=BT, this is the customer billing address. 3 When N101=8R, then N3 segment is required. 4 When updating billing address, use N3 segment.
Notes:	Ex: N3 123 Main Street ^a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
>> N301	166	Address Information Address information	M AN 1/55
N302	166	Address Information Address information	O AN 1/55

Segment:	N4 Geographic Location
Position:	070
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	1
Purpose:	To specify the geographic place of the named party
Syntax Notes:	
Semantic Notes:	
Comments:	<ol style="list-style-type: none"> 1 When N101=8R, this is the customer service address. 2 When N101=BT, this is the customer billing address. 3 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location. 4 N402 is required only if city name (N401) is in the U.S. or Canada. 5 When N101=8R, then N4 segment is required. 6 For Account Maintenance transactions, N4 is required for customer service zip code for validation purposes. 7 When updating customer billing address, an individual N4 segment is used to communicate the "new" city, state, and zip codes information.
Notes:	<p>Ex:</p> <p>N4 Belmont CA 91234^a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)</p>

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	O AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by a appropriate government agency	O ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States) PG&E will use the 5-digit character zip code. The +4 type of zip code is optional on incoming transactions. The zip code should be taken from the customer's billing statement. PG&E uses the zip code as a primary key.	M ID 3/15

Segment: **PER** Administrative Communications Contact
Position: 080
Loop: N1
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To identify a person or office to whom administrative communications should be directed
Syntax Notes: 1 If either PER03 or PER04 is present, then the other is required.
Semantic Notes:
Comments: 1 We identify the customer with their telephone number.
 2 This segment indicates customer's telephone number.
Notes: Ex: PER|IC||TE|5 105551234^a (Connect Accept – SP-ACK)

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
>>	PER01	366 Contact Function Code	M ID 2/2
		Code identifying the major duty or responsibility of the person or group named	
		IC Information Contact	
	PER03	365 Communication Number Qualifier	X ID 2/2
		Code identifying the type of communication number	
		TE Telephone	
		Customer's telephone number	
	PER04	364 Communication Number	X AN 1/80
		Complete communications number including country or a rea code when applicable	

Segment: **REF** Reference Identification
Position: 090
Loop: N1
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments: 1 This segment is not used in Connect Request transactions.
Notes: This convention of the REF segment is used for account maintenance and update, to convey change reason codes. The codes used in REF02 are maintained by the UIG. The first portion of the code identifies the segment that contains the data that has been changed; the remaining portion of the code identifies the relevant code qualifier for the data that has been changed. The changed data will appear in the appropriate element of the identified segment. For example, a REF02 code of N18R indicates that data in the N1 segment that is identified by the qualifier 8R (i.e., Customer Information) has been changed.
 Ex: REF|TD|N18R| (Reason for Change – Change in Customer Information)

Data Element Summary

Ref.	Data Element	Name	Attributes
>> REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification TD Reason for Change	M ID 2/3
REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier N18R Change Name or Service Address N190 Change Former/Departing ESP N1BT Change Bill to Party Name/Address N1SJ Change Energy Service Provider PERIC Change Information Contact Information	X AN 1/30
REF03	352	Description A free-form description to clarify the related data elements and their content	X AN 1/80

Segment:	LIN Item Identification
Position:	010
Loop:	LIN
Level:	Detail
Usage:	Optional (Must Use)
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	1 If either LIN04 or LIN05 is present, then the other is required.
Semantic Notes:	1 LIN01 is the line item identification
Comments:	
Notes:	A separate LIN loop is used for each service associated with a service account, i.e., one LIN per service, one service per LIN. For PG&E, LIN01 is always a "1".
	Ex: LIN 00001 SH EL SH CE ³ (Connect Request – SP-REQ) LIN 00001 SV EL SV CE ^a (Connect Reject & Accept – SP-NAK & ACK)

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>>	LIN01	350	Assigned Identification Alpha numeric characters assigned for differentiation within a transaction set A unique sequential number for each line item within this transaction set. For PG&E, this element is always a "1".	O AN 1/20
>>	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SH Service Requested A numeric or alphanumeric code from a list of services available to the customer This code is used for all request transactions. SV Service Rendered This code is used for all response transactions.	M ID 2/2
>>	LIN03	234	Product/Service ID Identifying number for a product or service EL Electric Service Indicates a customer request to obtain electric service. The 814 transaction is commodity-specific. PG&E allows one commodity per 814. GAS Gas Service Indicates a customer request to obtain gas service.	M AN 1/48
>>	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SH Service Requested A numeric or alphanumeric code from a list of services available to the customer This code is used for all request transactions. SV Service Rendered This code is used for all response transactions.	X ID 2/2

>>	LIN05	234	Product/Service ID	X	AN 1/48
			Identifying number for a product or service		
			CE		Customer Enrollment
					Generation Services. PG&E will use this code for all transactions.

Segment: **ASI** Action or Status Indicator
Position: 020
Loop: LIN
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To indicate the action to be taken with the information provided or the status of the entity described

Syntax Notes:
Semantic Notes:
Comments:
Notes:

Ex:
 ASI|7|021^a (Connect Request – SP-REQ)
 ASI|U|021^a (Connect Reject – SP-NAK)
 ASI|A4|021^a (Connect Accept – SP-ACK)

Data Element Summary

>>	Ref. Des. ASI01	Data Element 306	Name Action Code Code indicating type of action	Attributes M ID 1/2
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BGN01	ASI01	ASI02	DEFINITIONS
13	7	021	SP-REQ - CONNECT
11	WQ	021	SP-ACK - CONNECT
11	U	021	SP-NAK - CONNECT
13	7	002	SP-REQ - DISCONNECT
11	WQ	002	SP-ACK - DISCONNECT
11	U	002	SP-NAK - DISCONNECT
13	7	001	SP-REQ - UPDATE
11	WQ	001	SP-ACK - UPDATE
11	U	001	SP-NAK - UPDATE
14	7	022	SP-REQ - MAINTENANCE
11	WQ	022	SP-ACK - MAINTENANCE
11	U	022	SP-NAK - MAINTENANCE

For Detailed Table - See Table 1 CMEP to EDI Translation (pg. 11)

7	Request Request for action or information. Generated by the ESP or LDC.
27	Move Used to identify seamless move transaction.
A4	Pended Account entered into system and is a waiting effective date (account is on hold). In Process. Generated by the Utility.
C	Canceled Pending request/status has been canceled. Generated by the Utility.
F	Final

			U	Generated by the Utility. Reject Inability to accept for processing due to the lack of required information Indicates that the request cannot be processed due to the lack of required information.
			WQ	Generated by the Utility. Accept Request has been processed and completed. Generated by the Utility.
>>	ASI02	875	Maintenance Type Code	M ID 3/3
				Code identifying the specific type of item maintenance
			001	Change This is used for Update transactions only. This code is used when updating the following: Ex: - Relationships/providers - Requested start date - Billing option - Usage calculation code - Meter request
			002	Delete Disconnect. Use when customer desires termination of the furnished service.
			021	Addition Connect. Use to request and confirm new service.
			022	Change in Status This is used for Account Maintenance transactions only. This code is used when updating the following: Ex: - Renewable energy - New customer indicator - New premise
			024	Cancel Only used with seamless move transaction.

Segment: **REF** Reference Identification
Position: 030
Loop: LIN Optional (Must Use)
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:

Notes:
 Ex: (For a Connect Request – SP-REQ)
 REF|12|PG&E SA ID^a
 REF|11|ESP End-Use Customer Account Number^a
 REF|7F|N^a
 REF|O8|Y^a
 REF|PC|LDC|ESP DUNS#^a
 REF|BLT|ESP|ESP DUNS#^a
 REF|H5|Y^a

Data Element Summary

Ref.	Data	Name	Attributes
>>	REF01	Reference Identification Qualifier	M ID 2/3
	128	Code qualifying the Reference Identification	
		06 System Number	
		11 Account Number	
		12 Billing Account	

A unique number assigned by the manufacturer to identify the initial computer system sold to the customer
 For PG&E, this element is not required on request transactions.

Number identifies a telecommunications industry account
 This field is the **Service Provider (SP) end-use Customer ID.**
 When REF01 = 11 REF02 should not be more than 12 characters.

Account number under which billing is rendered
This is the LDC SAID.
 Utility-assigned Service Agreement ID for the end-use customer.

NOTE for Electric: For Initial Request Transaction (Enrollment) this will be the SA ID. For Confirmation and all future transactions i.e. Update, Account Maintenance, the **XREF** will be passed to the Service

	<p>Provider in REF01 – 12.</p> <p>The XREF will be PG&E’s permanent key for the account.</p> <p>This will be the SA ID used for validation (i.e. primary key). The SA ID is 10 characters.</p> <p>When REF01 = 12 REF02 should not be more than 10 characters.</p> <p>NOTE for Gas: For Initial Request Transaction (Enrollment) this will be the SA ID. For Confirmation and all future transactions an XREF will be passed to the Service Provider in REF01-12. It is a 10 character XREF.</p>
45	<p>Old Account Number</p> <p>Identifies accounts being changed</p> <p>Previous utility -assigned account reference for the end use customer. This is communicated in the Account Maintenance transaction.</p> <p>When REF01 = 45 REF02 should not be more than 12 characters.</p>
7F	<p>Repeat Location</p> <p>New customer indicator. See REF02 for valid values.</p>
AS	<p>Acceptable Source Supplier ID</p> <p>Other ESP. The "other" ESP's DUNS#.</p> <p>When REF01 = AS REF02 should not be more than 16 characters.</p>
BF	<p>Billing Center Identification</p> <p>Billing Cycle. Cycle number when the billing will be rendered.</p>
BLT	<p>Billing Type</p> <p>Identifies whether the bill is consolidated by the LDC or ESP, or whether each party will render their own bill. See REF02 for valid values.</p>
CE	<p>SA Collection Event Type</p> <p>Identifies meter collection event types</p>
CQ	<p>SA Contract Quantity</p> <p>Identifies certain SA quantity types</p> <p>Coverage Code</p>
D7	<p>Type of protection provided by an insurance policy</p> <p>Meter Installation Pending. See REF02 for valid values. For PG&E, this field may be used for Service Provider to request a meter installation.</p> <p>If REF02=Y, then REF01 code 91 is required and no DTM is provided. If REF02=Y, there is no scheduled start date in the DTM segment.</p>

GK	<p>Third Party Reference Number</p> <p>A unique number assigned to a claim after it has been entered into the third party payer's adjudication system; this number is used by the payer to track claims internally</p> <p>Former/Departing ESP's account number for the end use customer. This number is communicated to the former/departing ESP.</p> <p>When REF01 = GK REF02 should not be more than 12 characters.</p>
H5	<p>Special Clause</p> <p>Renewable Energy Provider. Indicates that renewable energy is provided for this account. See REF02 for valid values.</p>
O8	<p>Original Filing</p> <p>Used to indicate whether this account is a new premise within the utility's service territory. See REF02 for valid values.</p>
PC	<p>Production Code</p> <p>Identifies the party that is to calculate the charges on the bill. See REF02 for valid values.</p>
9V	<p>BPP Indicator</p> <p>Identifies if the account is on BPP</p>
22	<p>CARE Indicator</p> <p>Identifies if the customer is on CARE Program</p>
M7	<p>Medical Allotment</p> <p>Identifies if a customer has a Medical Allotment</p>
9W	<p>Pay Plan Indicator</p> <p>Identifies is customer is on Pay Plan</p>
NH	<p>Current Rate</p> <p>Identifies the customer's current rate schedule</p>
FR	<p>Future Rate</p> <p>Identifies the customer's future rate schedule</p>
OR	<p>Current OAS Rate</p> <p>Identifies the customer's current OAS rate schedule</p>
FO	<p>Future OAS Rate</p> <p>Identifies the customer's future OAS rate schedule</p>
ACC	<p>Account Status</p> <p>Indicates account status</p>
UU	<p>Town or Territory Code</p> <p>Identifies Town or Territory code of Customer</p>
18	<p>Plan Number</p> <p>The unique identification number assigned for a defined contribution plan</p> <p>Reading estimation method. The estimation rules applied to estimate values for missing data. See REF02 for valid values.</p>
LO	<p>Load Planning Number</p> <p>Load profile.</p>

RB	Rate code number
SU	Identifies an Energy Service Provider rate class Special Processing Code Unique code identifying the special handling requirements for the claim Life support equipment verification. See REF02 for valid values.

REF02 127 Reference Identification X AN 1/30

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

When REF01 is 7F, valid values for REF02 are:

- Y - New customer at this service address
- N - Existing customer at this service address.

When REF01 is BLT, valid values for REF02 are:

- LDC - The Utility is the bill presenter
- ESP - The ESP is the bill presenter
- DUAL - Each party presents its own bill to the customer

When REF01 is H5, valid values for REF02 are:

- Y - Renewable energy is provided
- N - Renewable energy is not provided

When REF01 is O8, valid values for REF02 are:

- Y - This is a new premise
- N - This is not a new premise

When REF01 is PC, valid values for REF02 are:

- LDC - The Utility calculates the ESP charges
- ESP - The ESP calculates the LDC charges
- DUAL - Each party calculates its own charges

When REF01 is 9V, valid values for REF02 are:

- Y - customer is on BPP, REF03 is BPP Amount
- N - Customer is not on BPP, REF03 is 0.00

When REF01 is M7, valid values for REF02 are:

Medical allotment amount

When REF01 is 9W, valid values for REF02 are:

Pay Plan amount

When REF01 is 18, valid values for REF02 are:

- LDC - LDC's internal estimation method
- MADAWG01 - CA's Metering and Data Access Work Group method

When REF01 is SU, valid values for REF02 are:

- Y - Life Support Required
- N - Life Support Not Required
- I - Investigating whether Life Support is Required

REF03	352	Description	X AN 1/80
		A free-form description to clarify the related data elements and their content Used to further describe the status reason code sent in REF02. When REF01 is BLT or PC.	

Segment: **REF** Reference Identification
Position: 030
Loop: LIN
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments: 1 This segment is not used in Connect Request transactions.
Notes: This convention of the REF segment is used primarily to convey status reason codes in response to a Request. The status reason codes are conveyed in this segment rather than in the ASI03 to allow for multiple status reasons.
 Ex: REF|7G|A76^a (Status Notification)

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		1P Accessorial Status Code Qualifies a single number that describes the status of an accessorial transportation service Warnings associated with an accept status notification.	
		7G Data Quality Reject Reason Reject reasons associated with a reject status notification.	
		NU Pending Case Pending reasons associated with a pending status notification.	
REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier The following codes have been identified by the UIG to convey status reason codes. Other codes may be used by a agreement of the trading partners when necessary.	X AN 1/30
		A03 Invalid meter address	
		A13 Other See explanation in REF03	
		A76 Account Not Found	
		A77 Name Specified Does Not Match Account	
		A82 Address Specified Does Not Match Account	
		A83 Unauthorized or Invalid Action	
		A84 Invalid Relationship	
		API Application Incomplete Required information missing. See REF03 for details.	
		D30 Requested service has been declined	

DIV Date Invalid
FRB Failed to Release Billing
Incorrect billing option requested

REF03 352 Description X AN 1/80
A free-form description to clarify the related data elements and their content
Used to further describe the status reason code sent in REF02.

REF01	REF02	REF03	COMMENT/DESCRIPTION
1P	A13	UTAXMT	Utility Users Tax Exemption.
1P	A13	CUSTMV	Used to identify seamless move notification.
1P	A83	ESPRATE	Invalid ESP Rate Schedule. LDC consolidated billing option (rate-ready) requested without ESP rate schedule.
7G	A13	EXP180	DASR expired due to PEND-MTR aged 180 days.
7G	A13	NOMTR	No External Metering Providers allowed. DASR expired due to PEND-MTR aged Metering Relationships requested for unmetered account or new customer account 180 days.
7G	A13	PREVDA	Blocked by pending DASR. Account is already in Pending Status.
7G	A13	RELCUR	Requested ESP already current
7G	A13	RELPEND	Duplicate DASR (requested ESP already pending).
7G	A13	#METER	Invalid meter count and meter information.
7G	A76	RCUSTID	Invalid LDC SAID#. For PG&E, entry <9 characters. No match on Receiver Customer ID/Zip Code provided.
7G	A76	SBMSTR	Account not authorized for DA (due to Service Location or Account Type). For PG&E, account is Summary Bill Master Account.
7G	A76	COMSTAT	Blocked by Invalid Status. Open commodity not found on account/pending Shut-off.
7G	A83	ACTYPE	Unauthorized Meter Request. Non-Interval meter requested (monthly/load profile) for a account with demand greater than 50 kilowatts.
7G	A83	COMMDTY	Invalid commodity. Requested other than electric commodity.
7G	A83	DA<3DAY	Scheduled DA active is less than 3 business days. DASR withdrawal request received within 3 business days of effective

			switch date.
7G	A83	OPTYPE	Invalid Operation Type (Request, Response, Advance Notification).
7G	A83	PG&EMO	Invalid MSP & MO combination. Requested Meter Owner = PG&E, yet Requested Meter Installer or Meter Maintainer is not PG&E. If PG&E is Meter Owner, PG&E is Meter Installer.

REF01	REF02	REF03	COMMENT/DESCRIPTION
7G	A83	MTR-N/A	Meter Request not allowed. Meter requested for unauthorized account (streetlight or fixed usage acct).
7G	A84	RECVRID	Invalid Receiver Identifier (not = LDC Dunn & Bradstreet #).
7G	A84	SENDID	Invalid Sender Identifier (not found on valid Service Provider list).
7G	A84	SVCREL	Invalid Service Relationship Codes.
7G	A84	MTR-REL	Meter Requested without identifying MSP. Meter Request must identify the MSP relationship provider.
7G	A84	PENDID	Invalid Service Provider ID (not authorized for requested service).
7G	API	CUSTNM	Incomplete Customer Name field.
7G	API	SVCADD	Incomplete Service Address.
7G	API	SNDCUST	Incomplete Sender Customer Identifier.
7G	DIV	DT/TM	Invalid Date/Time stamp/format.
7G	DIV	ST/DT	Invalid Requested Start Date. If Effective Start Date is not blank, invalid date format exists.
7G	DIV	END/DT	Invalid Requested End Date. If Effective End Date is not blank, invalid date format exists.
7G	DIV	INVRECDT	DASR received date is less than DASR created date.
7G	FRB	BILLOPT	Invalid Billing Option. For electric (non-streetlight) requests, value other than LDC, SP, or DUAL. For electric streetlight requests, value other than DUAL.
7G	FRB	SPBILL	Service Provider not authorized for ESP Consolidated Billing Option.

Segment:	REF Reference Identification
Position:	030
Loop:	LIN
Level:	Detail
Usage:	Optional
Max Use:	>1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
Semantic Notes:	
Comments:	1 This segment is not used in Connect Request transactions.
Notes:	This convention of the REF segment is used for account maintenance and update, to convey change reason codes. The codes used in REF02 are maintained by the UIG. The first portion of the code identifies the segment that contains the data that has been changed; the remaining portion of the code identifies the relevant code qualifier for the data that has been changed. The changed data will appear in the appropriate element of the identified segment. For example, a REF02 code of AMT7N indicates that data in the AMT segment that is identified by the qualifier 7N (i.e., Percentage of Service Supplied) has been changed to the value now shown in AMT02. Ex: REF TD REFMG KEY ^a (Reason for Change – Change in Meter Number)

Data Element Summary

Ref.	Data Element	Name	Attributes
>>	REF01	128 Reference Identification Qualifier Code qualifying the Reference Identification TD Reason for Change	M ID 2/3
	REF02	127 Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DTM007 Change Effective Date DTM243 Change Actual Complete Date REF06 Change System Number Not used by PG&E, this element is not required. REF11 Change Non-utility Trading Partner-assigned Account Number for the End Use Customer REF12 Change Utility-assigned Account ID# for the End Use Customer For PG&E Utility – assigned SA ID# REF45 Change Utility's previous Account Number for the End Use Customer REF7F Change New Customer Indicator REFAS Change Other ESP (The "Other" ESP's DUNS#) REFBF Change Billing Cycle REFBLT Change Billing Type (Bill Presenter) REFGK Change Former/Departing ESP's Account Number for End Use Customer REFH5 Change Renewable Energy Provider REFO8 Change New Premise Indicator	X AN 1/30

REFPC	Change Party that Calculates the Bill
REF9V	BPP Change Indicator
REFSU	Life Support Change
REFNH	Rate Schedule Change
REFFR	Future Rate Schedule Change
REFOR	OAS Rate Schedule Change
REFFO	Future OAS Rate Schedule Change
REFCQ	SA Contract Quantity Change
REFCE	SA Collection Event Change

REF03 **352** **Description** **X AN 1/80**

A free-form description to clarify the related data elements and their content

Disaster Codes

The codes below in REF03 indicate disaster code notifications

DSIR – Disaster Event Review – location with close proximity of disaster, but not confirmed if property is damaged/destroyed/Red Tagged

DSCL – Disaster Event Cleared – After review, the location is not deemed damaged/destroyed/Red Tagged

DSNT – Disaster Red Tag Notice – pending bill relief decision. Stops SA and final/closing bill but will not complete bill – temporary status

DSST – Disaster Red Tag Standard – bill relief not applied. Stops SA, final/closing bill, and completes bill (final status)

DSBR – Disaster Red Tag Bill Relief – bill relief applied. Stops SA, final/closing bill, completes bill and applies debt reversal adjustment for SA balance (final status)

DSOV – Disaster Red Tag Override – manual override. Process manually if needed. (final status)

Segment: **DTM** Date/Time Reference
Position: 040
Loop: LIN
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify pertinent dates and times
Syntax Notes:
Semantic Notes:
Comments: 1 Used to communicate a scheduled start date in a Connect Request. In NM1/REF(POS130), if D7=Y, then DTM is not provided.
 2 Used to communicate a scheduled start date in a Connect Response.
Notes: Ex: DTM|007|||D8|19990809^a (Connect Accept – SP-ACK)

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3
		007 Effective Effective date of a addition, change, or deletion (ASIO2). This is the scheduled effective date. When requesting future Connect start date, this is the future start date.	
		243 Actual Complete The actual complete date for a task or activity Date upon which the requested service was actually completed (BGN01 = CN).	
>> DTM05	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format	X ID 2/3
		D8 Date Expressed in Format CCYYMMDD	
>> DTM06	1251	Date Time Period Expression of a date, a time, or range of dates, times or dates and times PG&E Time Stamp is not communicated.	X AN 1/35

Segment: **NM1** Individual or Organizational Name
Position: 080
Loop: NM1
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: This indicates the start of an NM1 Loop.
Syntax Notes:
Semantic Notes:
Comments:
Notes: Ex: NM1|MQ|3^a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
>>	NM101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual MQ Metering Location	M ID 2/3
>>	NM102	1065	Entity Type Qualifier Code qualifying the type of entity 3 Unknown	M ID 1/1

Segment:	REF Reference Identification
Position:	130
Loop:	NM1
Level:	Detail
Usage:	Optional
Max Use:	>1
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
Semantic Notes:	
Comments:	Meter Level information.
Notes:	<p>Ex: (Connect Accept – SP-ACK)</p> <p>REF 18 LDC^a</p> <p>REF 4L S or P or T or PS^a</p> <p>REF 91 I or L^a</p> <p>REF D7 N or Y^a</p> <p>REF LO Usage Profile^a</p> <p>REF LU 101234512345678999^a</p> <p>REF MG 382R59^a</p> <p>REF NH LDC Rate Schedule^a</p> <p>REF RB SP Rate Schedule when Supplied^a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)</p> <p>REF SC M or U^a</p> <p>REF SU Y or N or I^a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)</p> <p>REF TZ Alpha Meter Read Serial^a</p>

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		4L	Location-specific Services Reference Number Meter service voltage. See REF02 for valid values.
		91	Cost Element A subdivision of costs defined by the accounting structure and the level that costs are recorded at within a cost accounting system (examples are labor, material, other direct costs) Usage calculation code. See REF02 for valid values. For PG&E this field is used for the Service Provider (SP) to identify the type of meter when requesting a meter installation. This field is required when REF01 is D7 and REF02=Y
		LU	Location Number Identification number for the point where service is delivered to the customer. Service Delivery Point (SDP) Identification number for the point where service is delivered to the customer. (See REF03 for valid use and values)
		MG	Meter Number

	Meter ID Serial Number. If multiple meters exist, then LU will need to be repeated with a nother MG loop. PG&E does not require the meter number for Connect Requests
MS	Meter Status Identifies the status of the meter (OFF/ON)
SP	Service Point Characteristics Identifies unique Service point Characteristics
SC	Shipper Car Order Number Special Identifier for un-metered accounts. See REF02 for valid values.
TZ	Total Cycle Number A complete set of events occurring in the same sequence Meter Cycle. Alpha Character indicating when the meter will be read. http://www.pge.com/001_res_svc/001a5_meter_read.shtml
ZW	Area Number assigned by a regulatory agency which describes a producing oil or gas area Congestion zone - a geographic area that requires power that exceeds the line capacity of the transmission system.
GE	Baseline
HC	Indicates customer's baseline Heat Source
QQ	Indicates customer's Heat Source Dwelling Units Indicates customer's dwelling units

REF02 127 Reference Identification X AN 1/30

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

When REF01 is 91, valid values for REF02 are:

- I - Interval
- L - Load Profile

When REF01 is D7, valid values for REF02 are:

- Y - Meter Installation is Pending
- N - Meter Installation is Not Pending

When REF01 is GE, valid values for REF02 are:

- UT - Universal Time Coordinate

When REF01 is SC, valid values for REF02 are:

- M - Metered
- U - Unmetered

When REF01 is SU, valid values for REF02 are:

- Y - Life Support Required
- N - Life Support Not Required
- I - Investigating whether Life Support is Required

When REF01 is 4L, valid values for REF02 are:

- S - Secondary
- P - Primary
- T - Transmission
- PS - Primary Sub-transmission

REF03	352	Description	X AN 1/80
		A free-form description to clarify the related data elements and their content	

Segment: **REF** Reference Identification
Position: 130
Loop: LIN
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:

Notes: Meter Entity Relationships

Ex: (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)
REF|V9|LDC^a
REF|VR|LDC^a
REF|VE|Other|MDMA DUNS#^a
REF|VA|ESP^a

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
>> REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		V9 Subservicer Meter owner at time of switch	
		VA Vessel Agent Number Meter Maintainer (MSP).	
		VE Vendor Abbreviation Code Meter Data Management Agent (MDMA) at time of switch.	
		VR Vendor ID Number Meter Installer.	
REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier When REF01 is V9, VA, VE, VR, valid values for REF02 are:	X AN 1/30
		LDC - Utility Company ESP - Energy Service Provider CUSTOMER – Customer (This is available only when REF01=V9) OTHER - Add DUNS Number in REF03	
		This REF is not required for unmetered accounts or new accounts.	
REF03	352	Description A free-form description to clarify the related data elements and their content When REF02=OTHER, this field will show a DUNS# for the other ESP. When REF02=LDC, ESP, or CUSTOMER, this field is not required.	X AN 1/80

Segment: **REF** Reference Identification
Position: 130
Loop: LIN
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:

Notes: This convention of the REF segment is used for Account Maintenance and Update transactions, to convey meter-level and entity relationship change reason codes. The codes used in REF02 are maintained by the UIG. The first portion of the code identifies the segment that contains the data that has been changed; the remaining portion of the code identifies the relevant code qualifier for the data that has been changed. The changed data will appear in the appropriate element of the identified segment. For example, REF02 code of REFVR indicates that data in the REF segment that is identified by the qualifier VR (i.e. Meter Installer) has been changed to the value now shown in REF02 of the REF*VR segment.

Ex: REF|TD|REFZW^a (Connect Accept – SP-ACK)

Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
>> REF01	128	Reference Identification Qualifier		M ID 2/3
		Code qualifying the Reference Identification		
		TD	Reason for Change	
REF02	127	Reference Identification		X AN 1/30
		Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
		REF18	Change Reading Estimation Method	
		REF4L	Change Meter Service Voltage	
		REF91	Change Usage Calculation Code	
		REFD7	Change Meter Installation Pending	
		REFLO	Change Load Profile	
		REFLU	Change Location Number	
		REFMG	Change Meter Number	
		REFNH	Change Utility Rate Class or Tariff	
		REFRB	Change ESP Rate	
		REFMS	Change Meter Status	
		REFSP	Change Service Point Characteristics	
		REFSC	Change Indicator for Unmetered Accounts	
		REFSU	Change Life Support Verification	
		REFTZ	Change Meter Cycle	
		REFV9	Change Meter Owner	
		REFVA	Change Meter Maintainer (MSP)	
		REFVE	Change Meter Data Management Agent (MDMA)	

		REFVR	Change Meter Installer	
		REFZW	Change Congestion Zone	
REF03	352	Description		X AN 1/80
		A free-form description to clarify the related data elements and their content		

Segment: **SE** Transaction Set Trailer
Position: 150
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:
Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.
Notes: Ex: SE|25|Originator's Transaction Set ID^a

Data Element Summary

Ref.	Data Element	Name	Attributes
>>	SE01	96 Number of Included Segments	M N0 1/10 Total number of segments included in a transaction set including ST and SE segments
>>	SE02	329 Transaction Set Control Number	M AN 4/9 Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set

Segment: **GE** Functional Group Trailer
Position: 030
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of a functional group and to provide control information
Syntax Notes:
Semantic Notes: 1 The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.
Comments: 1 The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header.
Notes: Ex: GE|1|43^a

Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
M	GE01	97	Number of Transaction Sets Included	M N0 1/6
			Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	
M	GE02	28	Group Control Number	M N0 1/9
			Assigned number originated and maintained by the sender	

Segment: **IEA** Interchange Control Trailer
Position: 040
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

Syntax Notes:

Semantic Notes:

Comments:

Notes: Ex: IEA|1|00000123^a

Data Element Summary

	<u>Ref.</u>	<u>Data</u>		<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	
M	IEA01	I16	Number of Included Functional Groups A count of the number of functional groups included in an interchange	M N0 1/5
M	IEA02	I12	Interchange Control Number A control number assigned by the interchange sender	M N0 9/9