

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

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
 Outbound Data Segment Terminator
 Outbound Data SubElement Separator
 (Hex Value 6A)
 (Hex Value 5F)
 (Hex Value A1)

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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.

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:

- o 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

- o 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:
- o One to convey status reason codes in response to a Request
- o 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

o 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
- o 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

			Trans.	1	1	1
CMEP Terms	EDI Terms	Initiated By	Irans. 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:

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

Header:

Page <u>No.</u> 19	Pos. <u>No.</u> 010	Seg. <u>ID</u> ST	<u>Name</u> Transaction Set Header	Req. <u>Des.</u> M	Max.Use	Loop <u>Repeat</u>	Notes and Comments
20	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
22	040	N1	Name	О	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	О	>1		

Detail:

Page <u>No.</u>	Pos. No.	Seg. <u>ID</u>	<u>Name</u>	Req. <u>Des.</u>	Max.Use	Loop <u>Repeat</u>	Notes and Comments
			LOOP ID - LIN			>1	
29	010	LIN	Item Identification	О	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	О	1		n2
43	130	REF	Reference Identification	O	>1		



Summary:

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

Interchange Control Trailer:

Page	Pos.	Seg.		Req.		Loop	Notes and
No.	No.	<u>ID</u>	<u>Name</u>	Des.	Max.Use	Repeat	Comments
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:

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

	Ref.	Data	Data Element Summar y		
	Des.	Element	Name	A ttu	<u>ibutes</u>
M	ISA01	<u>Element</u> 101	Authorization Information Qualifier		ID 2/2
IVI	15AU1	101	_		
			Code to identify the type of information in the Authorization		
			No Authorization Information Present (No M	leaningful
3.5	TC 4.00	T0.0	Information in IO2)		13740/40
M	ISA02	102	Authorization Information		AN 10/10
			Information used for additional identification or authorization		
			interchange sender or the data in the interchange; the type of	infor	mation is set
3.4	TCLAGE	102	by the Authorization Information Qualifier (I01)	3.7	TD 2/2
M	ISA03	I03	Security Information Qualifier		ID 2/2
			Code to identify the type of information in the Security Infor		
			No Security Information Present (No M	eanin	ıgful
3.5	T C 4 0 4	TO 4	Information in IO4)		13740/40
M	ISA04	I04	Security Information	M	AN 10/10
			This is used for identifying the security information about the		
			sender or the data in the interchange; the type of information	is set	by the
M	ISA05	105	Security Information Qualifier (I03)	м	ID 2/2
IVI.	15AU5	105	Interchange ID Qualifier		
			Qualifier to designate the system/method of code structure us	sea to	designate
			the sender or receiver ID element being qualified 01 Duns (Dun & Bradstreet)		
M	ISA06	I 06	· · · · · · · · · · · · · · · · · · ·	М	AN 15/15
IVI	15A00	100	Interchange Sender ID		
			Identification code published by the sender for other parties t		
			receiver ID to route data to them; the sender always codes this sender ID element	s van	ue in the
M	ISA07	105	Interchange ID Qualifier	М	ID 2/2
141	101107	100	Qualifier to designate the system/method of code structure us		
			the sender or receiver ID element being qualified	ica to	designate
			ZZ Mutually Defined		
M	ISA08	107	Interchange Receiver ID	M	AN 15/15
112	101100	107	Identification code published by the receiver of the data; Who		
			used by the sender as their sending ID, thus other parties send		
			use this as a receiving ID to route data to them		- , ,,
M	ISA09	I08	Interchange Date	M	DT 6/6
			Date of the interchange		
			<i>6</i>		



M	ISA10	109	Interchange Time	M	TM 4/4
			Time of the interchange		
M	ISA11	I10	Interchange Control Standards Identifier	\mathbf{M}	ID 1/1
			Code to identify the agency responsible for the control standard message that is enclosed by the interchange header and traile Refer to 004010 Data Element Dictionary for acceptable code	r	-
M	ISA12	I11	Interchange Control Version Number	\mathbf{M}	ID 5/5
			This version number covers the interchange control segments	3	
			00303 Draft Standard for Trial Use Approved: ASC X12 Procedures Review Board Th 1992		
			00401 Draft Standards for Trial Use Approved by ASC X12 Procedures Review Board 1997		
M	ISA13	I12	Interchange Control Number	\mathbf{M}	N0 9/9
			A control number a ssigned by the interchange sender		
M	ISA14	I13	Acknowledgment Requested	\mathbf{M}	ID 1/1
			Code sent by the sender to request an interchange a cknowled	gmen	nt(TA1)
			0 No Acknowledgment Requested		
M	ISA15	I14	Usage Indicator	M	ID 1/1
			Code to indicate whether data enclosed by this interchange en production or information		•
	T C 1.4.6		Refer to 004010 Data Element Dictionary for acceptable cod		
M	ISA16	I15	Component Element Separator Type is not applicable; the component element separator is a a data element; this field provides the delimiter used to separ data elements within a composite data structure; this value m than the data element separator and the segment terminator	delim ate co	mponent





GS Functional Group Header **Segment:**

Position:

Loop:

Level:

Usage: Mandatory

Max Use:

To indicate the beginning of a functional group and to provide control information **Purpose:**

Syntax Notes: Semantic Notes:

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: 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.

Ex: GS|IN|045000234|00691287702B|990715|130510|123|X|004010^a **Notes:**

Data Element Summary

	Ref.	Data	Duta Eleme	int Summar y		
	Des.	Element	<u>Name</u>		Attr	<u>ibutes</u>
M	$\overline{GS01}$	479	Functional Identifie	r Code	M	ID 2/2
			Code identifying a gr	oup of application related transaction se	ts	
			FA I	Functional Acknowledgement (997)		
			GE (General Request, Response or Confirma	ition	(814)
			IN I	Invoice Information (810,819)		
			MO	Maintenance Service Order (650)		
			PT I	Product Transfer and Resale Report (86	7)	
			RA I	Payment Order/Remittance Advice (820))	
M	GS02	142	Application Sender'	s Code	M	AN 2/15
			Code identifying part	y sending transmission; codes agreed to	by tı	rading
			partners			
M	GS03	124	Application Receive			AN 2/15
				y receiving transmission; codes a greed t	o by	trading
M	GS04	373	partners Date		M	DT 8/8
IVI	G504	313	Date expressed as CC	TYYMMDD	IVI	D1 0/0
M	GS05	337	Time		M	TM 4/8
IVI	G505	337		1		
				-hour clock time as follows: HHMM, or $MMSSDD$, where $H = hours (00-23)$, M		
				and SDD , where SDD and SDD = decimal seconds;		,
				ows: $D = tenths (0-9)$ and $DD = hundred$		
M	GS06	28	Group Control Num	ıber	\mathbf{M}	N0 1/9
			•	ginated and maintained by the sender		
M	GS07	455	Responsible Agency	Code	M	ID 1/2
				ction with Data Element 480 to identify t	he is	suerofthe
			standard	A 1'4 - 1 C+ 1 1- C '44 V12		
24	CCOO	400		Accredited Standards Committee X12	3.7	ANI 1/10
M	GS08	480		ndustry Identifier Code	M	:
			Code indicating the v	ersion, release, sub-release, and industry	y idei	ntifier of the



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



WE DELIVER ENERGY.

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

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



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.

BGN03 is the transaction set date.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

			Data Eler	nent Summary	
>>	Ref. <u>Des.</u> BGN01	Data Element 353	Transaction Set P	Purpose Code urpose of transaction set	Attributes M ID 2/2
			11	Response	
				Response to a previous request. This coresponse to a request transaction (i.e. CoDisconnect). CMEP-equivalent: SP-ACK, SP-NAK	onnect or
			13	Request	
				Request for information or action. This a request (i.e. Connect, Disconnect, or CMEP-equivalent: SP-REQ	
			14	Advance Notification	
				Notice of change. This code is used for purposes (i.e. ESP or LDC-generated A Maintenance transaction). CMEP-equivalent: SP-REQ MAINTE MAINTENANCE, CFG-UPDATE, SVC/DISCONNECT	ccount
			CN	Completion Notification	
				Signifies that the order is complete and contained within is final for the service order. CMEP-equivalent: CFG-CONNECT, ODISCONNECT	request purchase
>>	BGN02	127	Reference Identif		M AN 16/16
			Reference informa	tion as defined for a particular Transactior	Setoras

12/15/20 PG&E 814 v.4010 20

specified by the Reference Identification Qualifier



>>	BGN03	373	transaction. Thi same in respons Provider (ESP) F Date	ction identification number assigned by the or some number should be unique over time. If use transaction (i.e. BGN06). This is the Energy Record ID such as in the Connect Request to as CCYYMMDD	ed, this will be the gy Service
			The transaction	creation date. This is the date that the trans	action was created.
R	BGN04	337	Time		X TM 4/8
			HHMMSSD, or 59), S = integers are expressed as	in 24-hour clock time as follows: HHMM, of HHMMSSDD, where $H = hours (00-23)$, Moreonds $(00-59)$ and $DD = decimal$ seconds follows: $D = tenths (0-9)$ and $DD = hundre$	f = minutes (00- ; decimal seconds dths (00-99)
			The transaction Recommended f	saction was created.	
	BGN05	623	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 indicin 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 f		
				ne zone applicable to the BGN04 value.	
			Not recommend		
			AT	Alaska Time	
			CT	Central Time	
			ET	Eastern Time	
			GM	Greenwich Mean Time	
			HT	Hawaii-Aleutian Time	
			MT	Mountain Time	
			PT	Pacific Time	
	D CINO C	105	UT	Universal Time Coordinate	O AN 1/16
	BGN06	127	127 Reference Identification		
				nation as defined for a particular Transactio Reference Identification Qualifier	on Set or as
				the BGN02 identification number of the ori	iginal request.

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: 1 At least one of N102 or N103 is required.

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

Semantic Notes:

Comments:

1 This segment, used a lone, 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: Ex:

N1|SJ||1|ESP DUNS#||41a (Connect Request – SP-REQ)

N1|8S||1|006912744||41a (Connect Reject & Connect Accept – SP-NAK & SP-ACK)

Data Element Summary

	Ref.	Data			
	Des.	Element	<u>Name</u>		Attributes
>>	N101	98	Entity Identifier C	ode	M ID 2/3
			Code identifying an	organizational entity, a physical location, pr	operty or an
			individual		
			8R	Consumer Service Provider (CSP) Customer	er
				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 be-	ing
				rendered	
				This is the Energy Service Provider (ESI	P).
			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 trans	
				when there is a change in the service addre	ss.)
	N102	93	Name		X AN 1/60
			Free-form name	DT 1 N	
				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 a dditional 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.

When N101=BT, then N201 is not used.

Notes: Not used

Data Element Summary

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



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: 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

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



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:

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.

When updating customer billing address, an individual N4 segment is used to communicate the "new" city, state, and zip codes information.

Notes: Ex:

N4|Belmont|CA|91234a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)

Data Element Summary

Ref.	Data			
Des.	<u>Element</u>	<u>Name</u>	<u>Att</u>	<u>ributes</u>
N401	19	City Name	O	AN 2/30
		Free-form text for city name		
N402	156	State or Province Code	O	ID 2/2
		Code (Standard State/Province) as defined by appropriate gov	ernr	nent a gency
N403	116	Postal Code	M	ID 3/15
		Code defining international postal zone code excluding punct (zip code for United States)	uatio	on and blanks
		PG&E will use the 5-digit character zip code. The +4 type of optional on incoming transactions. The zip code should be ta customer's billing statement. PG&E uses the zip code as a pr	ken f	fromthe



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 a dministrative communications should be directed **ntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.

Syntax Notes: Semantic Notes:

Comments:

antic Notes:

We identify the customer with their telephone number.
 This segment indicates customer's telephone number.

Notes: Ex: PER|IC||TE|5105551234a (Connect Accept – SP-ACK)

Data Element Summary

>>	Ref. <u>Des.</u> PER01	Data <u>Element</u> 366	Name Contact Function Code	<u>Att</u> M	ributes ID 2/2
			Code identifying the major duty or responsibility of the pe	erson or	
			IC Information Contact		
	PER03	365	Communication Number Qualifier	\mathbf{X}	ID 2/2
			Code identifying the type of communication number		
			TE Telephone		
			Customer's telephone number		
	PER04	364	Communication Number	\mathbf{X}	AN 1/80
			Complete communications number including country or a applicable	rea code	when



Segment: REF Reference Identification

Position: 090
Loop: N1
Level: Heading
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: Semantic Notes: At least one of REF02 or REF03 is required.

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

			Data Ele	ement Summary		
	Ref.	Data				
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
>>	REF01	128	Reference Ident	ification Qualifier	M	$\overline{1D} 2/3$
			Code qualifying	the Reference Identification		
			TD	Reason for Change		
	REF02	127	Reference Ident	ification	X	AN 1/30
				nation as defined for a particular Transaction Reference Identification Qualifier Change Name or Service Address Change Former/Departing ESP Change Bill to Party Name/Address Change Energy Service Provider	n Set	oras
			PERIC	Change Information Contact Information	on	
	REF03	352	Description A free-form desc	cription to clarify the related data elements a	X and th	AN 1/80 eir content



LIN Item Identification **Segment:**

Position: Loop: LIN Level: Detail

Usage: Optional (Must Use)

Max Use:

Purpose: To specify basic item identification data

Syntax Notes: If either LIN04 or LIN05 is present, then the other is required.

Semantic Notes: LIN01 is the line item identification

Comments:

A separate LIN loop is used for each service a ssociated with a service account, i.e., one **Notes:**

LIN per service, one service per LIN. For PG&E, LIN01 is always a "1".

 $\begin{array}{ll} Ex:\; LIN|00001|SH|EL|SH|CE^a\;\;(Connect\;Request-SP-REQ) \\ LIN|00001|SV|EL|SV|CE^a\;\;(Connect\;Reject\,\&\;Accept-SP-NAK\,\&\;ACK) \end{array}$

Data Element Summary

			Data Licin	chi banina y	
	Ref.	Data			
	Des.	Element			Attributes ANA 120
>>	LIN01	350	Assigned Identifica		O AN 1/20
			•	cters assigned for differentiation within a	
				number for each line item within this train	nsaction set. For
	T TN102	225	PG&E, this element		N/ ID 2/2
>>	LIN02	235	Product/Service ID	~	M ID 2/2
			Product/Service ID (type/source of the descriptive number us (234)	sed III
			SH	Service Requested	
				A numeric or alphanumeric code from a available to the customer	list of services
				This code is used for all request transact	tions.
			SV	Service Rendered	
				This code is used for all response transa	ctions.
>>	LIN03	234	Product/Service ID		M AN 1/48
			Identifying number i	for a product or service	
			EL	Electric Service	
				Indicates a customer request to obtain el The 814 transaction is commodity-speciallows one commodity per 814.	
			GAS	Gas Service	
				Indicates a customer request to obtain ga	as service.
>>	LIN04	235	Product/Service ID Code identifying the Product/Service ID (SH	type/source of the descriptive number us 234) Service Requested	
				A numeric or a lphanumeric code from a a vailable to the customer This code is used for all request transact	
			SV	Service Rendered	
			5,	This code is used for all response transa	ctions
				This code is used for an response transa	ctions.



>> 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.

ASI Action or Status Indicator **Segment:**

Position: Loop: LIN Level: Detail

> **Usage:** Optional (Must Use)

Max Use:

To indicate the action to be taken with the information provided or the status of the entity **Purpose:**

described

Syntax Notes: Semantic Notes: Comments:

>>

Notes:

Ex:

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

Data Element Summary

Ref. Data

Des. Element Name ASI01 306 Action Code **Attributes** M ID 1/2

Code indicating type of action

BGN01	ASI01	ASI02	<u>DEFINITIONS</u>
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 EDITranslation (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

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				Generated by the Utility.
			U	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.
				Generated by the Utility.
			WQ	Accept
				Request has been processed and completed.
				Generated by the Utility.
>>	ASI02	875	Maintenance Typ	
			• •	ne 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
			021	Connect. Use to request and confirm new service.
			022	Change in Status
			022	
				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
Semantic Notes:

Comments:

Notes: Ex: (For a Connect Request – SP-REQ)

REF|12|PG&E SAIDa

REF 11 ESP End-Use Customer Account Number^a

At least one of REF02 or REF03 is required.

REF|7F|N^a REF|08|Y^a

REF|PC|LDC|ESP DUNS#^a REF|BLT|ESP|ESP DUNS#^a

REF|H5|Ya

Data Element Summary

Data Element Summary					
	Ref.	Data			
	Des.	Element	<u>Name</u>		<u>Attributes</u>
>>	$\overline{\text{REF0}}$ 1	128			$\overline{\text{M}}$ ID 2/3
			06	System Number	
			00	•	.C
			A unique number a ssigned by the manufacturer to identify the initial computer system sold to the computer system sold to the computer system. For PG&E, this element is not required on requestions.		
				transactions.	1
			11 Account Number Number identifies a telecommunications industry		
					s industry
				account	•
				This field is the Service Provider (SP)	end-use
				Customer ID.	
				When $REF01 = 11 REF02$ should not b	e m ore than 12
				characters.	
			12	Billing Account	
				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 Reques	
				(Enrollment) this will be the SA ID. Fo	
				and all future transactions i.e. Update, A	
				Maintenance, the XREF will be passed	to the Service



Provider in REF01 – 12.

The XREF will be PG&E's permanent key for the account.

This will be the SAID used for validation (i.e. primary key). The SAID is 10 characters.

When REF01 = 12 REF02 should not be more than 10 characters.

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.

45 Old Account Number

Identifies accounts being changed

Previous utility-assigned account reference for the end use customer. This is communicated in the Account Maintenance transaction.

When REF01 = 45 REF02 should not be more than 12 characters.

7F Repeat Location

New customer indicator. See REF02 for valid values.

AS Acceptable Source Supplier ID

Other ESP. The "other" ESP's DUNS#.

When REF01 = AS REF02 should not be more than 16 characters.

BF Billing Center Identification

Billing Cycle. Cycle number when the billing will be

rendered.

BLT Billing Type

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.

CE SA Collection Event Type

Identifies meter collection event types

CQ SA Contract Quantity
Identifies certain SA quantity types

Coverage Code

Type of protection provided by an insurance policy

Meter Installation Pending. See REF02 for valid values. For PG&E, this field may be used for Service Provider

to request a meter installation.

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.



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



RB Rate code number

Identifies an Energy Service Provider rate class

SU 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

36

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: Semantic Notes: 1 At least one of REF02 or REF03 is required.

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)

	D. C	D. A.	Data Elem	ent Summary	
>>	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identific Code qualifying the	cation Qualifier Reference I dentification	Attributes M ID 2/3
			1P	Accessoria1Status Code	
				Qualifies a single number that describes accessorial transportation service Warnings associated with an accept stat	
			7G	Data Quality Reject Reason	
				Reject reasons associated with a reject s notification.	tatus
			NU	Pending Case	
				Pending reasons associated with a pendinotification.	ing status
	REF02	127	Reference Identific		X AN 1/30
			specified by the Ref The following code:	on as defined for a particular Transaction ference Identification Qualifier is have been identified by the UIG to convert may be used by a greement of the trading	ey status reason
			A03	Invalid meter address	
			A13	Other	
				See explanation in REF03	
			A76	Account Not Found	
			A77	Name Specified Does Not Match Accou	
			A82	Address Specified Does Not Match Acc	ount
			A83	Unauthorized or Invalid Action	
			A84	Invalid Relationship	
			API	Application Incomplete Required information missing. See REI	F03 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	UUTAXMT	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 a ged	
			180 days.	
7G	A13	NOMTR	No External Metering Providers allowed.	
			DASR expired due to PEND-MTR a ged	
			Metering Relationships requested for	
			unmetered account or new customer	
			account 180 days.	
7G	A13	PREVDA	Blocked by pending DASR.	
			Account is a lready in Pending Status.	
7G	A13	RELCUR	Requested ESP already current	
7G	A13	RELPEND	Duplicate DASR (requested ESP	
			a lready pending).	
7G	A13	#METER	Invalid meter count and meter	
			information.	
7G	A76	RCUSTID	Invalid LDC SA ID#.	
			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	
.		G01.60m.1m	Master Account.	
7G	A76	COMSTAT	Blocked by Invalid Status.	
			Open commodity not found on account/	
	4.02	A CITY IDE	pending Shut-off.	
7G	A83	ACTYPE	Unauthorized Meter Request.	
			Non-Interval meter requested	
			(monthly/load profile) for account with	
7.0	402	COMMENT	demand greater than 50 kilowatts.	
7G	A83	COMMDTY	Invalid commodity.	
7.0	402	DA 2DAY	Requested other than electric commodity.	
7G	A83	DA<3DAY	Scheduled DA active is less than 3	
			business days.	
			DASR withdra wal request received	
			within 3 business days of effective	



			switch date.
7G	A83	ОРТҮРЕ	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: Semantic Notes: 1 At least one of REF02 or REF03 is required.

Comments: Notes:

1 This segment is not used in Connect Request transactions.

This convention of the REF segment is used for account maintenance and up date, 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

			Data Ele	ment Summary
	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
>>	REF01	128	Reference Identi	fication Qualifier M ID 2/3
			Code qualifying the	he Reference I dentification
			TD	Reason for Change
	REF02	127	Reference Identi	fication X AN 1/30
			Reference inform	ation as defined for a particular Transaction Set or as
			specified by the R	eference 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 SAID#
			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



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

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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

 $\label{eq:DSCL-Disaster} \textbf{DSCL} - \textbf{Disaster} \, \textbf{EventCleared} - \textbf{After} \, \textbf{review}, \textbf{the location} \, \textbf{is} \, \textbf{not} \, \textbf{deemed} \, \textbf{damaged/destroyed/RedTagged}$

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 debtreversal adjustment for SA balance (final status)

DSOV – Disa ster 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.	Data			
	Des.	Element	<u>Name</u>		<u>Attributes</u>
>>	DTM01	374	Date/Time Qualific	er	M ID 3/3
			Code specifying typ	pe of date or time, or both date and time	
			007	Effective	
			243	Effective date of addition, change, or de This is the scheduled effective date. W future Connect start date, this is the future Actual Complete	henrequesting
				The actual complete date for a task or a	ctivity
				Date upon which the requested service completed (BGN01=CN).	was actually
>>	DTM05	1250	Date Time Period	Format Qualifier	X ID 2/3
				date format, time format, or date and tim	eformat
			D8	Date Expressed in Format CCYYMMD	DD
>>	DTM06	1251		e, a time, or range of dates, times or dates is not communicated.	X AN 1/35 s and times



Segment: NM1 Individual or Organizational Name

Position: 080 Loop: NM1 Level: Detail

Usage: Optional (Must Use)

Max Use:

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

	Ref.	Data		·	
	Des.	Element	<u>Name</u>		Attributes
>>	NM101	98	Entity Identi	fier Code	M ID 2/3
			Code identify individual	ring an organizational entity, a physical loc	cation, property or an
			MQ	Metering Location	
>>	NM102	1065	Entity Type Code qualifyi	Qualifier ing the type of entity	M ID 1/1
			3	Unknown	



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: Ex: (Connect Accept – SP-ACK)

REF|18|LDC^a

REF|4L|S or P or T or PS^a

REF|91|I or L^a REF|D7|N or Y^a REF|LO|Usage Profile^a

REF|LU||1012345123456789999a

REF|MG|382R59^a

REF|NH|LDCRate Schedulea

REF|RB|SP Rate Schedule when Supplied (Connect Request, Reject & Accept –

SP-REQ, NAK & ACK)

REF|SC|MorUa

REF|SU|Y or N or I^a (Connect Request, Reject & Accept – SP-REQ, NAK & ACK)

REF|TZ|Alpha Meter Read Seriala

Data Element Summary

			1	Data Element Summary
>>	Ref. <u>Des.</u> REF01	Data Element 128		ce Identification Qualifier M ID 2/3 alifying the Reference Identification
			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	MeterNumber



	Meter ID Serial Number. If multiple meters exist, then LU will need to be repeated with another MG loop. PG&E does not require the meter number for Connect
MS	Requests Meter Status
MD	Identifies the status of the meter (OFF/ON)
SP	Service Point Characteristics
51	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 a gency which describes a producing oil or gas area
	Congestion zone - a geographic area that requires power
	that exceeds the line capacity of the transmission
GE	system.
GL	Baseline
HC	Indicates customer's baseline
	Heat Source
QQ	Indicates customer's Heat Source
	Dwelling Units
	Indicates customer's dwelling units
fananaa Idantifi	ection V AN 1/20

REF02 127 Reference Identification

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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

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

S - Secondary P - Primary

T - Transmission PS - Primary Sub-transmission

REF03 352 **Description**

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

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REF Reference Identification **Segment:**

Position: Loop: LIN Level: Detail **Usage:** Optional Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 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|LDCa REF VR LDCa

REF|VE|Other|MDMA DUNS#a

REF|VA|ESPa

			Data Eleme	ent Summary		
>>	Ref. <u>Des.</u> REF01	Data Element 128	Reference Identification	ation Qualifier Reference I dentification		ibutes ID 2/3
			V9	Subservicer		
				Meter owner at time of switch		
			VA	Vessel Agent Number		
				Meter Ma intainer (MSP).		
			VE	Vendor Abbreviation Code		
				Meter Data Management Agent (MDM switch. Vendor ID Number	A) at	time of
				Meter Installer.		
	REF02	127	Reference Identifica	ation	X	AN 1/30
				on as defined for a particular Transaction erence Identification Qualifier	Set	oras
			LDC - Utility Compa ESP - Energy Service	e Provider omer (This is a vailable only when REF0		9)
				ired for unmetered accounts or new accounts		
	REF03	352	Description			AN 1/80
				ion to clarify the related data elements an		
				ER, this field will show a DUNS# for the ESP, or CUSTOMER, this field is not re		

Segment: **REF** Reference Identification

Position: 130
Loop: LIN
Level: Detail
Usage: Optional
Max Use: >1

Purpose: To specify identifying information

Syntax Notes: 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)

At least one of REF02 or REF03 is required.

Data Element Summary

			Data El	lement Summary		
	Ref.	Data				
	Des.	Element				<u>ributes</u>
>>	REF01	128		tification Qualifier	M	ID 2/3
			Code qualifying	the Reference Identification		
			TD	Reason for Change		
	REF02	127	Reference Iden	tification	X	AN 1/30
				mation as defined for a particular Transact Reference Identification Qualifier Change Reading Estimation Method		oras
			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 REFSP REFSC REFSU	Change Meter Status Change Service Point Characteristics Change Indicator for Unmetered Acc Change Life Support Verification		
			REFTZ	Change Meter Cycle		
			REFV9	Change Meter Owner		
			REFVA	Change Meter Maintainer (MSP)		
			REFVE	Change Meter Data Management Ag	ent (MI	OMA)

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 $REFVR \qquad \quad Change\,Meter\,Installer$

 $REFZW \qquad Change\ Congestion\ Zone \\ REF03 \qquad \textbf{352} \qquad \textbf{Description} \qquad \qquad \textbf{X} \quad \textbf{AN 1/80}$

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			
	Des.	Element	<u>Name</u>	<u>Attr</u>	<u>ributes</u>
>>	SE01	96	Number of Included Segments	\mathbf{M}	N0 1/10
			Total number of segments included in a transaction set included	dingS	STandSE
			segments		
>>	SE02	329	Transaction Set Control Number	${f M}$	AN 4/9
			Identifying control number that must be unique within the tr functional group assigned by the originator for a transaction		tionset



WE DELIVER ENERGY.SM

Segment: \mathbf{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

M	Ref. <u>Des.</u> GE01	Data Element 97	Name Number of Transaction Sets Included		ributes 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



WE DELIVER ENERGY.SM

Segment: IEA Interchange Control Trailer

Position: 040

Loop:

Level:

Usage: Mandatory

Max Use:

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

	Ref.	Data	•			
	Des.	Element	<u>Name</u>	Attr	Attributes	
M	IEA01	I16	Number of Included Functional Groups	M	N0 1/5	
			A count of the number of functional groups included in an ir	ıterch	ange	
M	IEA02	I12	Interchange Control Number	\mathbf{M}	N0 9/9	
			A control number a ssigned by the interchange sender			