



Utility Industry Group Implementation Guideline

For

Electronic **D**ata **I**nterchange

San Diego Gas and Electric
Feb 2016

TRANSACTION SET

814

**General Request,
Response or Confirmation**
Ver/Rel 004010

Summary of Changes

November 13, 1998

Initial release:

The differences between this Ver/Rel 004010 and Ver/Rel 003070 are as follows:

Pos.	Ref Des	Data Element	Name	Attributes 3070	Attributes 4010
H020	BGN03	373	Date	M DT 6/6	M DT 8/8
H040	N104	67	Identification Code	X AN 2/20	X AN 2/80
H130	ITD06	446	Terms Net Due Date	O DT 6/6	O DT 8/8
D040		1250	Date Time Period Format Qualifier	DTM06 in 3070	DTM05 in 4010
Note: Ver 3070 provided qualifiers D6, D8, RD6, and RD8 in DTM06. Ver 4010 provides D8 and RD8 only in DTM05.					
D040		1251	Date Time Period	DTM07 in 3070	DTM06 in 4010
D060	AMT01	522	Amount Qualifier Code	M ID 1/2	M ID 1/3
D060	AMT02	782	Monetary Amount	M R 1/15	M R 1/18
D080	NM109	67	Identification Code	A N 2/20	A N 2/80

In addition to the above changes, this version reflects numerous revisions reflecting the move from a "one-to-many" convention; i.e., one transaction covering many accounts, to a "one-to-one" convention; i.e., one transaction covers only one account.

April 26, 1999

Added a new Best Practice and a note with the ASI segment, both concerning acceptance/rejection at the account level.
 REF01 Position 030 - Added code PG
 AMT01 - Added code T
 REF01 Position 130 - Added codes QI and 7G
 REF02 Position 130 - Added values for use when REF01 is QI. Added code A13 for use when REF01 is 7G

May 25, 1999

Miscellaneous Clean up:

- Moved REF*TD codes to appropriate levels (, Account, Meter)
 - Clarified that the REF*TD segments are used for account maintenance and update.
 - Separated the REF segment for Entity Relationships for clarity.
 - Corrected REF01 = KY to KZ as was originally agreed.
- REF01 Position 030 – Added code IJ (SIC Codes)
 DTM02 Position 040 - Added to DTM segment

October 20, 2015

Added New Codes:

- PER01 Position 080 HDR – Added code ID (3rd Party Phone)
- REF01 Position 030 DTL – Added code PID (Program ID for Demand Response Program)
- DTM01 Position 040 DTL – Added code 196 (Begin Date of Demand Response Date)
- REF01 Position 130 DTL – Added code 6K (Zone to indicate Climate Zone Code)
- REF01 Position 130 DTL – Added code 6Y (Equipment Initial)
- REF01 Position 130 DTL – Added code AAW (North American Industry Classification System)
- REF01 Position 130 DTL – Added code ACC (Service Status)
- REF01 Position 130 DTL – Added code ACD (Class Code. Identifies a utility rate class or tariff)
- REF01 Position 130 DTL – Added code MR (Merchandise Type Code)
- REF01 Position 130 DTL – Added code Q4 (Prior Identifier Number to indicate Old SDP Number)
- REF01 Position 130 DTL – Added code QQ (Max Demand - Unit Number to indicate the highest Demand Reading for a Service for the designated time frame – Day, Year or Month)
- REF01 Position 130 DTL – Added code QY (Service Performed Code)

February 18, 2016

Miscellaneous Cleanup:

- Corrected EDI examples provided in LIN Notes section to match actual position of LIN02
- Added bold/underline to LIN03 Product/Service ID: GAS
- Added bold/underline to new codes added on 10/20/15 (listed above)

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814 General Request, Response or Confirmation

Introduction

The function of the Utility Industry Group is

To represent Electric, Gas, and Combination Utilities, their suppliers, their customers, and other interested parties as an Industry Action Group to the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12, specifically in the standards-setting process, for their Electronic Data Interchange business needs.

To encourage, promote, and establish conventions for the use of ASC X12 standards as the "recommended" method of EDI. To develop and coordinate, as required, implementation guidelines and tools to promote the growth and timely implementation of Electronic Commerce/EDI within the industry.

To provide a forum for the exchange of ideas related to Electronic Commerce/EDI and its influence on the business needs of the industry.

The UIG will represent the Edison Electric Institute (EEI) and its members to facilitate implementation of Electronic Commerce/EDI in the Utility Industry.

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 disenrollment 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 entity which has the primary business relationship with the customer (Code SJ)

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

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Best Practices

Global Best Practices

Use of Text Segments

- The UIG recommends that the note (NTE) segment be avoided because this segment is not machine-readable. Other text segments, such as MSG and PID, may be used if their use will lead to machine processable information in subsequent applications.

Use of ZZ Qualifier

- The use of data fields to transmit uncoded or textual information should be avoided. This practice is usually associated with the use of the ZZ qualifier as a normal course of doing business.

997 - Functional Acknowledgment

- The purpose of the 997 is to verify receipt of a transmitted document only, not the acceptance of the document. For example, the acceptance of a purchase order (850) is accomplished through the use of the purchase order acknowledgment transaction (855).

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.

Use of Dun & Bradstreet (D-U-N-S) Number

- Dun & Bradstreet assign a nine-digit identification number to every business entity. This number, known as the D-U-N-S number, should be used to identify the trading partners. A trading partner may append a four-digit suffix to the D-U-N-S number to uniquely identify a specific location within the entity; this number is referred to as a D-U-N-S + 4 number

Banking Transactions

- Guidelines that outline the use of transactions relating to interactions between a sender and the sender's financial institution are available from the Bankers EDI Council and the NACHA EDI Council. Other publications that address the use of financial payment transactions include Technical Report 1 (TR1) and Technical Report 2 (TR2); both of these publications are available from DISA.

Capitalization

- The use of all upper case (capital) letters is preferred over the use of mixed upper and lower case letters.

Document-Specific Best Practices

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.

Use of the LIN Segment

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. The NM1 loop contains data relative to each meter on that account. 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 is 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.

Use of the DTM02/03

Use of DTM02/03 rather than DTM05/06 allows the translator to validate on date and time. This facilitates immediate rejection with a 997.

While there is at present no preferred coding practice, UIG encourages the use of DTM02/03 in new implementations, where possible.

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 error information at the meter level is optional; however, rejecting at the meter level can lead to splitting accounts.

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Functional Group ID=**GE**

Heading

	<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>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BGN	Beginning Segment	M	1		
						LOOP ID - N1	>1
Recomm	040	N1	Name	O	1		n1
	050	N2	Additional Name Information	O	2		
	060	N3	Address Information	O	2		
	070	N4	Geographic Location	O	1		
	080	PER	Administrative Communications Contact	O	>1		

Detail

	<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
Must Use	010	LIN	Item Identification	O	1		
Must Use	020	ASI	Action or Status Indicator	O	1		
	030	REF	Reference Identification	O	>1		
Recomm	040	DTM	Date/Time Reference	O	>1		
	060	AMT	Monetary Amount	O	>1		
	070	PM	Electronic Funds Transfer Information	O	1		
						LOOP ID - NM1	>1
Must Use	080	NM1	Individual or Organizational Name	O	1		n2
	090	N2	Additional Name Information	O	2		
	100	N3	Address Information	O	2		
	110	N4	Geographic Location	O	1		
	120	PER	Administrative Communications Contact	O	>1		
	130	REF	Reference Identification	O	>1		

Summary

	<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>
Must Use	150	SE	Transaction Set Trailer	M	1		

Segment: **ST** Transaction Set Header

Position: 010

Loop:

Level: Heading:

Usage: Mandatory

Max Use: 1

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

Syntax Notes:

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

Comments:

Data Element Summary

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

Segment: **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:

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
Must Use	BGN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
			06 Confirmation Confirms receipt of the Request; action on the requested service is pending.	
			<u>11</u> Response (CA Implementation) Signifies that the requested service will be addressed as described in this transaction.	
			<u>13</u> Request (CA Implementation)	
			<u>14</u> Advance Notification (CA Implementation)	
			<u>CN</u> Completion Notification (CA Implementation) Signifies that the requested service was completed as described in this transaction, not as identified in the original Response.	
Must Use	BGN02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A unique transaction identification number assigned by the originator of this transaction. This number should be unique over time.	M AN 1/30
Must Use	BGN03	373	Date Date (CCYYMMDD) The transaction creation date. This is the date that the transaction was created by the application system.	M DT 8/8
	BGN04	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) The transaction creation time. This is the time that the transaction was created by the application system.	X TM 4/8

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 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

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 Reference Identification O AN 1/30

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.

Segment: **N1** Name
Position: 040
Loop: N1
Level: Heading:
Usage: Recommended
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:
 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:
Comments:
 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
 2 N105 and N106 further define the type of entity in N101.

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
		28	Subcontractor	Used to identify the party that installs the meter.
		2C	Co-Participant	Used to identify a third party who shares responsibility for payment of the customer's bill.
		48	In-Service Source	Used to identify the party that reads the meter.
		55	Service Manager	Used to identify the party that manages meter data on behalf of another. Often referred to as the Meter Data Management Agent (MDMA).
		85	Billing Provider	Used to identify the party that will present the bill to the end use customer
		8R	<u>Consumer Service Provider (CSP) Customer (CA Implementation)</u>	<u>Used to identify the customer associated with the service account</u>
		8S	<u>Consumer Service Provider (CSP) (CA Implementation)</u>	<u>Used to identify the entity that provides services to the end use customer on behalf of another. In the deregulated, alternative energy supply environment, this is the Utility</u>
		90	Previous Business Partner	Used to identify the former/departing ESP.

		AO	Account Of Used to identify the former name or service address for the current end use customer. Used when the customer name or written service address has changed. Code 8R is used to qualify the new, replacement name or address.	
		BF	Billed From Used to identify the party that will calculate the bill.	
		BT	Bill-to-Party Used to identify a billing address for the customer associated with the service account.	
		BY	Buying Party (Purchaser) Used to identify a centralized management or accounts payable location responsible for the location identified by code 8R.	
		FE	Mail Address Forwarding mailing address, typically used to notify another party when a customer moves.	
		H8	Servicing Agent Used to identify the party that services and maintains the meter. Often referred to as the Meter Service Provider (MSP).	
		OK	Owner Used to identify the party that owns the meter.	
		<u>PK</u>	<u>Party to Receive Copy (CA Implementation)</u> <u>Used to identify a third party that is to receive a copy of all notices (not bills) to the end use customer.</u>	
		<u>RS</u>	<u>Receiving Facility Scheduler (CA Implementation)</u> <u>Used to identify the scheduling coordinator.</u>	
		<u>SJ</u>	<u>Service Provider (CA Implementation)</u> <u>Used to identify the entity that has the primary business relationship with the end use customer and which would otherwise be responsible for the service now being provided by the consumer service provider (Code 8S). In the deregulated, alternative energy supply environment, this is the Energy Service Provider.</u>	
N102	93	Name		X AN 1/60
		Free-form name		
N103	66	Identification Code Qualifier		X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)		
		<u>1</u>	<u>D-U-N-S Number, Dun & Bradstreet (CA Implementation)</u>	
		9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
		24	Employer's Identification Number	

		91	Assigned by Seller or Seller's Agent An identifier assigned by the Consumer Service Provider, N101=8S		
		92	Assigned by Buyer or Buyer's Agent An identifier assigned by the Service Provider, N101=SJ or the customer, N101=8R		
		SL	Standard License State registration number for Service Provider used only if the N101 = SJ.		
N104	67	Identification Code		X	AN 2/80
			Code identifying a party or other code		
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.		
		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:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	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:

Notes: When N101 = 8R, this is the customer service address

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
	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: 1 If N406 is present, then N405 is required.
Semantic Notes:
Comments: 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
 2 N402 is required only if city name (N401) is in the U.S. or Canada.
Notes: When N101 = 8R, this is the customer service address

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</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 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)	O ID 3/15
N404	26	Country Code Code identifying the country	O ID 2/3
N405	309	Location Qualifier Code identifying type of location CO County/Parish and State	X ID 1/2
N406	310	Location Identifier Code which identifies a specific location	O AN 1/30

Segment: **PER Administrative Communications Contact**
Position: 080
Loop: N1
Level: Heading:
Usage: Optional
Max Use: >1
Purpose: To identify a person or office to which administrative communications should be directed
Syntax Notes:
 1 If either PER03 or PER04 is present, then the other is required.
 2 If either PER05 or PER06 is present, then the other is required.
 3 If either PER07 or PER08 is present, then the other is required.
Semantic Notes:
Comments:

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
		<u>1D</u> Third Party Administrator (TPA) Contact <u>IC</u> Information Contact (CA Implementation)	
PER02	93	Name Free-form name	O AN 1/60
PER03	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
		EM Electronic Mail FX Facsimile <u>TE</u> Telephone (CA Implementation)	
PER04	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/80
PER05	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
		EM Electronic Mail FX Facsimile TE Telephone	
PER06	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/80
PER07	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
		EM Electronic Mail FX Facsimile TE Telephone	
PER08	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/80

Segment: **LIN** Item Identification
Position: 010
Loop: LIN
Level: Detail:
Usage: 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.
 When responding to a Request, the best practice is to identify the LIN segment (LIN01) with the same identification sent in the Request LIN01. Can repeat LIN06 and LIN07, etc... As many LIN pairs may be used as necessary to provide all secondary services.
 Note: The 3070 version of the 814 guideline allowed all services to be transmitted in one LIN segment. In this version, we recommend the use of LIN03 to identify the primary service and LIN05 to identify what is to be done to the primary service. For example, *LIN*0001*SH*EL*SH*CE* indicates that the primary service is 'electric service' and 'customer enrollment' is the action to be done. Other examples: *LIN*0001*SH*EL*SH*HU* requests historical usage of electric service
*LIN*0001*SH*GAS*SH*MI* requests meter information on the gas service

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set A unique sequential number for each line item within this transaction set.	O AN 1/20
Must Use	LIN02	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	M ID 2/2
			SH <u>Service Requested (CA Implementation)</u>	
			SV Service Rendered	
Must Use	LIN03	234	Product/Service ID Identifying number for a product or service	M AN 1/48
			EL <u>Electric Service (CA Implementation)</u> <u>Indicates a customer request to obtain electric service.</u>	
			FO Fuel Oil Service Indicates a customer request to obtain fuel oil service.	
			GAS <u>Gas Service (CA Implementation)</u> <u>Indicates a customer request to obtain gas service.</u>	
			LP Liquid Propane Service Indicates a customer request to obtain liquid propane gas service.	

			ST	Steam Service Indicates a customer request to obtain steam service.
			SW	Sewage Service Indicates a customer request to obtain sewage service.
			WA	Water Service Indicates a customer request to obtain water service.
Must Use	LIN04	235	Product/Service ID Qualifier	M ID 2/2
				Code identifying the type/source of the descriptive number used in Product/Service ID (234)
			SH	<u>Service Requested (CA Implementation)</u>
			SV	Service Rendered
Must Use	LIN05	234	Product/Service ID	M AN 1/48
				Identifying number for a product or service
			AW	Appliance Warranty Indicates a customer request for warranty repair services.
			BB	Budget Billing Indicates a customer request for a levelized billing arrangement.
			CE	Customer Enrollment (CA Implementation) Indicates a customer request to enroll in the service defined in LIN03 (Electric Generation, Gas Delivery, etc.)
			EC	Electronic Credit Indicates a customer request to receive any credit due via electronic credit.
			ED	Electronic Debit Indicates a customer request to make payment via electronic debit.
			EI	Electronic Invoicing Indicates a customer request to be billed electronically.
			HU	Historical Usage Indicates an ESP request to obtain historical usage information for this customer. This information would be returned on an EDI 867.
			MI	Meter Information Indicates an ESP request to obtain detailed information about the existing meter. This information would be returned on an EDI 650.
			MR	Meter Reading Indicates a customer request to obtain meter reading services.
			MT	Meter Test Indicates a request for the meter to be tested.

		MUR	Meter Usage Resend Indicates a request to have meter usage data resent for the specified account and meter.
		MUV	Meter Usage Validation Indicates a request to have meter usage data validated for the specified account and meter.
		RRC	Retroactive Rate Change Indicates a customer request for a new rate to be effective retroactive to a previous billing cycle.
		SR	Special Meter Read Indicates an ESP request to obtain a special, off-cycle meter read for this customer. If the meter agent cannot provide this service, they should indicate that on the response transaction by populating REF*7G with status reason code W09.
		VL	Volunteer Indicates a customer request to volunteer for a pilot or phase-in of deregulation.
LIN06	235	Product/Service ID Qualifier	M ID 2/2
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
		Can repeat LIN06 and LIN07, etc... As many LIN pairs may be used as necessary to provide all secondary services	
		SH	Service Requested
		SV	Service Rendered
LIN07	234	Product/Service ID	M AN 1/48
		Identifying number for a product or service	
		BB	Budget Billing Indicates a customer request for a levelized billing arrangement.
		EC	Electronic Credit Indicates a customer request to receive any credit due via electronic credit.
		ED	Electronic Debit Indicates a customer request to make payment via electronic debit.
		EI	Electronic Invoicing Indicates a customer request to be billed electronically.
		HU	Historical Usage Indicates an ESP request to obtain historical usage information for this customer. This information would be returned on an EDI 867.
		MI	Meter Information Indicates an ESP request to obtain detailed information about the existing meter. This information would be returned on an EDI 650.

SR

Special Meter Read

Indicates an ESP request to obtain a special, off-cycle meter read for this customer. If the meter agent cannot provide this service, they should indicate that on the response transaction by populating REF*7G with status reason code W09.

Segment: **ASI** Action or Status Indicator
Position: 020
Loop: LIN
Level: Detail:
Usage: 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: Identifies the action to be taken or the status of a requested action for the service identified in the LIN segment.

Status Reason Codes are conveyed in the REF segment (position 030) rather than in the ASI03, to allow for multiple status reasons.

It is a recommended practice to provide the action or status **indication** at the account level only, with the option to provide information about any errors at the meter level for accounts related to multiple meters.

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
Must Use	ASI01	306	Action Code	M ID 1/2
			Code indicating type of action	
			6 Receive	
			<u>7</u> Request (CA Implementation)	
			27 Moved - Follow Up	
			Used to designate a seamless transfer of ESP when a customer moves within a Utility's service territory.	
			<u>A4</u> Pended (CA Implementation)	
			In process	
			C Canceled	
			<u>F</u> Final (CA Implementation)	
			TD Temporarily Deny	
			<u>U</u> Reject (CA Implementation)	
			V Respond	
			<u>WQ</u> Accept (CA Implementation)	
Must Use	ASI02	875	Maintenance Type Code	M ID 3/3
			Code identifying the specific type of item maintenance	
			<u>001</u> Change (CA Implementation)	
			<u>002</u> Delete (CA Implementation)	
			<u>021</u> Addition (CA Implementation)	
			Use when requesting or confirming a new service. CA Implementation	
			<u>022</u> Change in Status (CA Implementation)	
			024 Cancellation or Termination	
			025 Reinstatement	
			To place in force again, without the usual probationary or service period.	
			029 Inquiry	

051	Denial
066	Status Request
101	Servicer Change

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:

Notes: This convention of the REF segment is used for account level information.

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
		<u>06</u>	<u>System Number (CA Implementation)</u> <u>When a utility uses logical account numbers (those that change when a meter route is changed, etc.), the utility can assign a System Number as a permanent key for the account. The customer account number may be used for the initial Request transaction (enrollment), but the System Number will be passed to the Service Provider during confirmation and will be used for all future transactions.</u>	
		0B	State License Number Energy Service Provider license or registration number	
		<u>11</u>	<u>Account Number (CA Implementation)</u> <u>Non-utility trading partner assigned account number for the end use customer. In the deregulated, alternative energy supply environment, this is the Energy Service Provider-assigned account number for the end use customer. If an ESP account number is changed, this is the new ESP account number; the old ESP account number is qualified by WF</u>	
		<u>12</u>	<u>Billing Account (CA Implementation)</u> <u>Utility-assigned account number for end use customer.</u>	
		<u>45</u>	<u>Old Account Number (CA Implementation)</u> <u>Utility's previous account number for the end use customer.</u>	
		5B	Supplemental Account Number Energy Service Provider-assigned account number for the utility.	
		65	Total Order Cycle Number Meter owner's meter reading cycle number	

<u>7F</u>	<u>Repeat Location (CA Implementation)</u> <u>New customer indicator. See REF02 for valid values.</u>
9V	Payment Category Payment option
AJ	Accounts Receivable Customer Account Utility-assigned account number for the Energy Service Provider
<u>AS</u>	<u>Acceptable Source Supplier ID (CA Implementation)</u> <u>Identifies the former/departing or gaining (other) ESP DUNS number. Use REF02 for the number.</u>
<u>BF</u>	<u>Billing Center Identification (CA Implementation)</u> <u>Billing cycle. Cycle number when the billing will be rendered.</u>
<u>BLT</u>	<u>Billing Type (CA Implementation)</u> <u>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.</u>
<u>GK</u>	<u>Third Party Reference Number (CA Implementation)</u> <u>Former/departing ESP's account number for the end use customer.</u>
<u>H5</u>	<u>Special Clause (CA Implementation)</u> <u>Renewable Energy Provider. Indicates that renewable energy is provided for this account. See REF02 for valid values.</u>
IJ	Standard Industry Classification (SIC) Code
K0	Approval Code Customer has acknowledged responsibility for paying competitive transition charges (stranded costs). See REF02 for valid values.
KW	Certification Certification number for renewable energy
<u>NR</u>	<u>Progress Payment Number (CA Implementation)</u> <u>Used to convey budget billing status. See REF02 for valid values.</u>
<u>O8</u>	<u>Original Filing (CA Implementation)</u> <u>Used to indicate whether this account is a new premise within the utility's service territory. See REF02 for valid values.</u>
<u>PC</u>	<u>Production Code (CA Implementation)</u> <u>Identifies the party that is to calculate the charges on the bill. See REF02 for valid values.</u>
PG	Product Group Identifies a public or private group that aggregates customers and contracts load on their behalf.

<u>PID</u>	<u>Program Identification Number</u> <u>Program ID for Demand Response Program</u> <u>(CA Implementation)</u>
S0	Special Approval Indicates the extent to which the customer has authorized the release of confidential information. See REF02 for valid values.
SR	Sales Responsibility
	Service relationship
ST	Store Number
	An internal reference number meaningful to the customer
TN	Transaction Reference Number
	Used to provide a unique identification number for the request for this customer.
U0	Consolidator's Receipt Number
	Energy Service Provider transaction number
<u>WF</u>	<u>Locally Assigned Control Number</u> <u>(CA Implementation)</u> <u>ESP's previous account number for the end use customer.</u>

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

(CA Implementation)

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

Y - New customer at this service address

N - Existing customer at this service address

(CA Implementation)

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

(CA Implementation)

When REF01 is H5, valid values for REF02 are:

Y - Renewable energy is provided

N - Renewable energy is not provided

When REF01 is K0, valid values for REF02 are:

Y - Acknowledgment received

N - Acknowledgment not received

When REF01 is NR, valid values for REF02 are:

Y - This customer is on budget billing

N - This customer is not on budget billing

(CA Implementation)

When REF01 is O8, valid values for REF02 are:

Y - This is a new premise

N - This is not a new premise

(CA Implementation)

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 S0, valid values for REF02 are:

00 - Customer has released no information

01 - Customer has released name and address

02 - Customer has released name, address and telephone number

03 - Customer has released name, address and usage

04 - Customer has released name, address, telephone number
and usage

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.

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:

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. SDG&E will use this segment to respond with a Reject code to an Account Maintenance Request. The rejection will only validate the UDC Account number and Meter number.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
		1P Accessorial Status Code Warnings associated with an accept status notification.	
		7G Data Quality Reject Reason (CA Implementation) Reject reasons associated with a reject status notification. Use with REF02='A13' and a text message in REF03, validating the UDC Account number or Meter number.	
		NU Pending Case (CA Implementation) Pending reasons associated with a pending status notification. SDG&E will not pend and account, therefore this code will not be used.	
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 agreement of the trading partners when necessary.	X AN 1/30
		007 Service Terminated Because of Nonpayment	
		008 Account Exists but is Not Active	
		017 Service Terminated Because the Service Provider Went Out of Business	
		020 Customer Moved	
		023 Cannot Access the Meter	
		027 Payment Dispute	
		A03 Invalid Meter Address (CA Implementation)	
		A13 Other See explanation in REF03 (CA Implementation)	

A75	Invalid Account Format
<u>A76</u>	<u>Account Not Found (CA Implementation)</u>
<u>A77</u>	<u>Name Specified Does Not Match Account (CA Implementation)</u>
A78	Item or Service Already Established, Cannot Add Use when a Request ASI02 was 021, Add
A79	Item or Service Not Established, Cannot Modify Use when a Request ASI02 was 001, Change
A80	Item or Service Not Available
A81	Item or Service Not Available on Requested Date
<u>A82</u>	<u>Address Specified Does Not Match Account (CA Implementation)</u>
<u>A83</u>	<u>Unauthorized or Invalid Action (CA Implementation)</u>
<u>A84</u>	<u>Invalid Relationship (CA Implementation)</u>
A91	Service is Not Offered at Customer's Location
A95	Offer Expired
ABN	Duplicate Request Received
ANE	Account Not Eligible
ANL	Service Provider Not Licensed to Provide the Requested Service
ANV	Account Not Volunteered
<u>API</u>	<u>Application Incomplete (CA Implementation)</u> <u>Required information missing. See REF03 for details.</u>
APV	Account Previously Volunteered
B04	Requested Service will Not be Completed Until Outstanding Payment is Made
B14	Reason for Termination is Required but was Not Furnished
B30	Currently Enrolled
B31	Not Currently Enrolled
B33	Customer Name is Missing from the Request
<u>B38</u>	<u>Dropped (CA Implementation)</u> <u>Customer was terminated by the Service Provider for reasons other than nonpayment</u>
B39	Already Dropped
BBA	Budget Billing Applied
BBR	Budget Billing Rejected
C02	Customer is on Credit Hold
CCE	Customer Contract Expired
CHA	Customer Changed to Another Service Provider
COP	Conclusion of Pilot Program
D30	Requested Service has been Declined
D50	Effective Date of Service has been Changed
<u>DIV</u>	<u>Date Invalid (CA Implementation)</u>
EB3	Withdrawn Customer rescinded enrollment request

EBA	Requested Incentive Not Found or Not in Effect on the Requested Date
<u>FRB</u>	<u>Failed to Release Billing (CA Implementation)</u> <u>Incorrect billing option requested</u>
HUR	Historical Usage Not Released
HUU	Historical Usage Unavailable
MIU	Meter Information Unavailable
NFI	Not First In
NLI	Not Last In
NMI	No Meter Installed
<u>P01</u>	<u>Processing Delay (CA Implementation)</u> <u>Request received, processing will be delayed</u>
PAL	Request Accepted Pending Licensing of Service Provider
SNP	Service Not Provided
THT	Theft
	Service terminated because of customer's diversion of service
UMA	Unmetered Account
UND	Cannot Identify Service Provider
UNE	Cannot Identify LDC
W05	Requested Rate Not Found or Not in Effect on the Requested Date
W09	Special, Off-Cycle Meter Reading Cannot be Performed. Meter will be Read on the Normal, On-Cycle Read Date

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.

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:

Notes: This convention of the REF segment is used for account maintenance, 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.

Data Element Summary

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			<u>TD</u>	<u>Reason for Change (CA Implementation)</u>
	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	
			<u>A13</u>	<u>Other (CA Implementation)</u>
				See explanation REF03.
			AMT7N	Change Percentage of Service Supplied
			AMTDP	Change Percentage of Service Tax Exempt
			AMTKC	Change Capacity Obligation
			AMTKZ	Change Transmission Obligation
			AMTLD	Change Number of Months Total kWh (AMT*TA) or Peak Demand (AMT*MA) is Calculated
			AMTMA	Change Peak Demand
			AMTQY	Change Eligible Load Percentage
			AMTTA	Change Total kWh
			DTM007	Change Effective Date
			DTM129	Change Customer Contract Effective Date
			DTM150	Change Service Period Start Date
			DTM151	Change Service Period End Date
			DTM215	Change Date of temporary shut-off
			DTM216	Change Date of restoration from temporary shut-off
			DTM243	Change Actual Complete Date
			DTM245	Change Estimated Completion Date
			DTM802	Change Date of Action
			DTMMRR	Change Meter Read Date

N128	Change Meter Installer
N12C	Change Third Party Name/Address
N148	Change Meter Reading Party
N155	Change Meter Data Management Agency
N185	Change Billing Party
N18R	Change Name or Service Address
N1BF	Change Party that Calculates the Charge on the Bill
N1BT	Change Bill To Party Name/Address
N1BY	Change Centralized Management or Accounts Payable Name/Address
N1FE	Change Mailing Address
N1H8	Change Party that Services and Maintains the Meter
N1OK	Change Meter Owner
N1PK	Change Party to Receive Copy Name/Address
N1RS	Change Scheduling Coordinator
N1SJ	Change Energy Service Provider
PERAL	Change Alternate Contact Information
PERIC	Change Information Contact Information
PM	Change EFT Information
REF06	Change System Number (Permanent Key Account Number)
REF0B	Change ESP's License or Registration Number <u>Change Non-Utility Trading Partner-Assigned Account Number for the End Use Customer (CA Implementation)</u>
<u>REF12</u>	<u>Change Utility-Assigned Account Number for the End Use Customer (CA Implementation)</u>
REF5B	Change ESP-Assigned Account Number for Utility
REF65	Change Meter Owner's Meter Read Cycle Moved to REF 130 Meter Level for future implementations
REF9V	Change Payment Option
REFAJ	Change Utility-Assigned Account Number for the ESP
<u>REFBF</u>	<u>Change Billing Cycle (CA Implementation)</u>
REFBLT	Change Billing Type (Bill Presenter)
REFGK	Change Former/Departing ESP's Account Number for End Use Customer
REFH5	Change Renewable Energy Provider
REFIJ	Change Standard Industry Code (SIC) Classification
REFK0	Change Approval Code
REFKW	Change Certification Number
REFNR	Change Budget Billing Status

REFO8 Change New Premise Indicator
 REFPC Change Party that Calculates the Bill
 REFPG Change Public or Private Aggregator
 REFS0 Change Release of Confidential Information
 Indicator
 REFSP Change Point at Which the Customer is Connected
 to Transmission Grid
 REFSR Change Service Relationship
 REFST Change Customer Reference Number
 REFU0 Change ESP Transaction Number
 REFWF Change ESP's previous account number for the end
 use customer

REF11 **Change ESP-Assigned Account Number for the
 End Use Customer
 (CA Implementation)**

REF03	352	Description	X	AN 1/80
		Key Change (<u>CA Implementation</u>)		
		Misc Change (<u>CA Implementation</u>)		

Segment: **DTM** Date/Time Reference
Position: 040
Loop: LIN
Level: Detail:
Usage: Recommended
Max Use: >1
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 DTM03 or DTM06 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM06 or DTM07 is present, then the other is required.

Semantic Notes:
Comments:

Notes: To specify a time zone (DTM04), both DTM03 and DTM04 must be present. Therefore, if specification of a time zone is necessary, DTM06 should include only the date, not the time.

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			<u>007</u>	Effective (CA Implementation)
				Date upon which an addition, change, or deletion is requested to become effective (BGN01=13) or will become effective (BGN01=11).
		129	Customer Contract Effective	
				The date/time the customer agreed to obtain service from the Service Provider.
		150	Service Period Start	
				Date that the service with the Service Provider will start.
		151	Service Period End	
				Date that the service with the Service Provider will end.
		<u>196</u>	Start	
			Begin Date of Demand Response Date (CA Implementation)	
		<u>215</u>	Interruption Start (CA Implementation)	
			Date of temporary shut-off.	
		<u>216</u>	Interruption End (CA Implementation)	
			Date of restoration from temporary shut-off.	
		<u>243</u>	Actual Complete (CA Implementation)	
			Date upon which the requested service was actually completed (BGN01 = CN).	
		245	Estimated Completion	
				Date upon which it is estimated that the requested service will be completed (BGN01=11).
		802	Date of Action	
				Date of the request or acceptance.
		MRR	Meter Reading	
				Date of special meter read

	DTM02	373	DATE	X	DT 8/8
			Date expressed as CCYYMMDD Use of DTM02/03 allows the translator to validate date and time.		
	DTM03	337	Time	X	TM 4/8
			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)		
	DTM04	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 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		
			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		
Rec	DTM05	1250	Date Time Period Format Qualifier	X	ID 2/3
			Code indicating the date format, time format, or date and time format		
			D8		<u>Date Expressed in Format CCYYMMDD</u> <u>(CA Implementation)</u>
			DT		Date and Time Expressed in Format CCYYMMDDHHMM
			RD8		Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD A range of dates expressed in the format CCYYMMDD-CCYYMMDD where CCYY is the numerical expression of the century CC and year YY, MM is the numerical expression of the month within the year, and DD is the numerical expression of the day within the year; the first occurrence of CCYYMMDD is the beginning date and the second occurrence is the ending date
			RDT		Range of Date and Time, Expressed in Format CCYYMMDDHHMM-CCYYMMDDHHMM A range of dates and times expressed in the format CCYYMMDDHHMM-CCYYMMDDHHMM where CCYY is the numerical expression of the century CC and year YY, MM is the numerical expression of the month within the year, DD is the numerical expression of the day within the month, HH is the numerical expression of hours in the day based on a twenty-four hour clock, and MM is the numerical expression of minutes within an hour; the first occurrence of CCYYMMDDHHMM is the starting time and the second is the ending time
Rec	DTM06	1251	Date Time Period	X	AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times		

Segment: **AMT** Monetary Amount
Position: 060
Loop: LIN
Level: Detail:
Usage: Optional
Max Use: >1
Purpose: To indicate the total monetary amount
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Amount Qualifier Code</u>	<u>M ID 1/3</u>
Must Use	AMT01	522	Code to qualify amount	
			7N Participating Interest	
			This code is used when the Energy Service Provider supplies less than 100% of the customer's load. Element AMT02 identifies the percentage of the service that is supplied.	
			DP Exemption	
			This code is used when a portion of the provided service is exempt from taxation. Element AMT02 identifies the percentage of the service that is tax exempt.	
			KC Obligated	
			Capacity obligation	
			KZ Total Cycle Number	
			Transmission obligation	
			LD Incremental	
			Number of months over which Total kWh or Peak Demand is calculated.	
			MA Maximum Amount	
			Peak demand	
			QY Qualified	
			Eligible Load Percentage. Percentage of the customer's load that is eligible for competition.	
			T Tax	
			Used when Account is 100% taxable AMT02 monetary amount would be "1".	
			TA Total Annual Sales	
			Total kWh	
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	
			For percentage values, the whole number "1" represents 100 percent; decimal numbers less than "1" represent percentages from 1 percent to 99 percent.	

Segment: **PM Electronic Funds Transfer Information**
Position: 070
Loop: LIN
Level: Detail:
Usage: Optional
Max Use: 1
Purpose: To supply information on the electronic funds transfer (EFT) method of payment
Syntax Notes:
Semantic Notes:

- 1 PM01 is the transit routing number of the Customer's financial institution.
- 2 PM02 is the Customer's account number.
- 3 PM03 is the authorization for electronic funds transfer indicator. A "Y" value indicates authorization has been granted to allow electronic funds transfer. If no authorization has been granted for electronic funds transfer, this segment is not sent.
- 4 PM04 is the authorization signature for electronic funds transfer on file indicator. A "Y" value indicates that a signature has been obtained and is on file; an "N" value indicates a signature has not been obtained.
- 5 PM05 qualifies the account number indicated in PM02.
- 6 PM06 qualifies the Depository Financial Institution (DFI) Identification Number indicated in PM01.

Comments:
Notes: This segment is used when electronic debit or credit service has been identified in LIN05.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	PM01	507	(DFI) Identification Number Depository Financial Institution (DFI) identification number The customer's Depository Financial Institution	M AN 3/12
Must Use	PM02	508	Account Number Account number assigned The customer's account in the financial institution identified in PM01, to which debits or credits shall be applied.	M AN 1/35
Must Use	PM03	1073	Yes/No Condition or Response Code Code indicating a Yes or No condition or response Y Yes Indicates that the customer has requested and authorized electronic debits or credits.	M ID 1/1
Must Use	PM04	1073	Yes/No Condition or Response Code Code indicating a Yes or No condition or response N No Indicates that a written authorization has been received by the CSP from the customer and is on file, thereby satisfying Regulation E, but an authorizing signature was not included. Y Yes Indicates that a written authorization, including an authorizing signature, has been received by the CSP from the customer and is on file, thereby satisfying Regulation E.	M ID 1/1
	PM05	569	Account Number Qualifier Code indicating the type of account	O ID 1/3

		DA	Demand Deposit		
		SG	Savings		
PM06	506	(DFI) ID Number Qualifier		O	ID 2/2
Code identifying the type of identification number of Depository Financial Institution (DFI) Qualifies the customer financial institution identified in PM01.					
		01	ABA Transit Routing Number Including Check Digits (9 digits)		

Segment: **NM1** Individual or Organizational Name
Position: 080
Loop: NM1
Level: Detail:
Usage: Must Use
Max Use: 1
Purpose: To supply the full name of an individual or organizational entity
Syntax Notes: 1 If either NM108 or NM109 is present, then the other is required.
Semantic Notes: 1 NM102 qualifies NM103.
Comments:
Note: This segment is used to convey meter level information. Only NM101 and NM102 are required.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	NM101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			MQ Meter Location (CA Implementation)	
Must Use	NM102	1065	Entity Type Qualifier Code qualifying the type of entity	M ID 1/1
		1	Person The entity name is segmented into discrete elements; if sent, it is transmitted via NM103, NM104, NM105, NM106 and NM107.	
		2	Non-Person Entity The entity name is not segmented; if sent, it is transmitted in NM103 only.	
		3	Unknown (CA Implementation) The entity name is not segmented; if sent, it is transmitted in NM103 only.	
	NM103	1035	Name Last or Organization Name Individual last name or organizational name	O AN 1/35
	NM104	1036	Name First Individual first name	O AN 1/25
	NM105	1037	Name Middle Individual middle name or initial	O AN 1/25
	NM106	1038	Name Prefix Prefix to individual name	O AN 1/10
	NM107	1039	Name Suffix Suffix to individual name	O AN 1/10
	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67)	X ID 1/2
		92	Assigned by Buyer or Buyer's Agent An identifier assigned by the Service Provider (N101=SJ)	
	NM109	67	Identification Code Code identifying a party or other code	X AN 2/80

Segment: **N2** Additional Name Information
Position: 090
Loop: NM1
Level: Detail:
Usage: Optional
Max Use: 2
Purpose: To specify additional names or those longer than 35 characters in length
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	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: 100
Loop: NM1
Level: Detail:
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	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: 110
Loop: NM1
Level: Detail:
Usage: Optional
Max Use: 1
Purpose: To specify the geographic place of the named party
Syntax Notes: 1 If N406 is present, then N405 is required.
Semantic Notes:
Comments: 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
 2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>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 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)	O ID 3/15
N404	26	Country Code Code identifying the country	O ID 2/3
N405	309	Location Qualifier Code identifying type of location CO County/Parish and State	X ID 1/2
N406	310	Location Identifier Code which identifies a specific location	O AN 1/30

Segment: **PER Administrative Communications Contact**
Position: 120
Loop: NM1
Level: Detail:
Usage: Optional
Max Use: >1
Purpose: To identify a person or office to which administrative communications should be directed

Syntax Notes:

- 1 If either PER03 or PER04 is present, then the other is required.
- 2 If either PER05 or PER06 is present, then the other is required.
- 3 If either PER07 or PER08 is present, then the other is required.

Semantic Notes:
Comments:

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			AL Alternate Contact	
			Person to be contacted when the main contact is not available	
			IC Information Contact	
	PER02	93	Name	O AN 1/60
			Free-form name	
	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			HP Home Phone Number	
			TE Telephone	
			WP Work Phone Number	
	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			HP Home Phone Number	
			TE Telephone	
			WP Work Phone Number	
	PER06	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
	PER07	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			HP Home Phone Number	

		TE	Telephone		
		WP	Work Phone Number		
PER08	364	Communication Number		X	AN 1/80

Complete communications number including country or area code when applicable

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:

Data Element Summary

Must Use	Ref. Des.	Data Element	Name	Attributes
	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			18 Plan Number Reading estimation method. The estimation rules applied to estimate values for missing data. See REF02 for valid values.	
			46 Old Meter Number (CA Implementation) Identifies meters being removed	
			4L Location-Specific Services Reference Number Meter service voltage	
			4P Affiliation Number Meter constant or meter multiplier Billed Usage = (Ending Meter Reading - Beginning Meter Reading) X Meter Multiplier	
			6K Zone (CA Implementation) Identified the climate zone the service is located in: 1 = Coastal 2 = Mountain 3 = Desert 4 = Inland	
			6Y Equipment Initial (CA Implementation) Identifies whether the account service Smart Meter is billing with interval data. Y or N flag	
			91 Cost Element (CA Implementation) Usage calculation code. See REF02 for valid values.	
			AAW Agency Assigned Number (CA Implementation) Mutually Defined. This will be used to provide the North American Industry Classification System (NAICS) Code	
			ACC Status (CA Implementation) Identifies the status of the service, A - Active service is billing, I - Service is Inactive and not being billed, R - Meter has been removed from service point. Use REF03 for the description	
			ACD Class Code (CA Implementation)	

	<u>Identifies a utility rate class or tariff</u> <u>Use REF03 for the description:</u> <u>R - Residential</u> <u>C - Commercial</u> <u>I - Industrial</u>
<u>D7</u>	<u>Coverage Code (CA Implementation)</u> <u>Meter installation pending. See REF02 for valid values.</u>
D8	<u>Loss Report Number (CA Implementation)</u> <u>Service Voltage Indicator. See REF02 for valid values.</u> Distribution loss designator or identifier
GE	Geographic Number
	Customer's time zone. See REF02 for valid values.
IX	Item Number
	Number of dials on the meter
<u>LO</u>	<u>Load Planning Number (CA Implementation)</u> <u>Load profile</u>
<u>LU</u>	<u>Location Number (CA Implementation)</u> <u>Identification number for the point where service is delivered to the customer. (See REF02 & REF03 for valid use and values)</u>
<u>MG</u>	<u>Meter Number (CA Implementation)</u> <u>Meter ID serial number</u>
<u>MR</u>	<u>Merchandise Type Code (CA Implementation)</u> <u>This flag (Y or N) indicates whether the premise/service point is Net Energy Metering (NEM).</u>
MT	Meter Ticket Number
	Meter type
<u>NH</u>	<u>Rate Card Number (CA Implementation)</u> <u>Identifies a utility rate class or tariff</u>
PL	Price List Number
<u>PR</u>	<u>Price Quote Number (CA Implementation)</u> <u>Identifies a unit pricing category under a rate code. See REF02 for valid codes.</u>
PRT	Product Type Identifies the type of service; e.g., yard light, water heater, etc.
<u>Q4</u>	<u>Prior Identifier Number (CA Implementation)</u> <u>Identifies Old Service Deliver Point</u>
QI	Quality Inspection Area Identifier Identifies whether an off-cycle reading is or will be an actual or estimated reading.
<u>QQ</u>	<u>Unit Number (CA Implementation)</u> <u>Max Demand - Indicates the highest Demand Reading for a Service for the designated time frame (Day, Year or Month)</u>
<u>QY</u>	<u>Service Performed Code (CA Implementation)</u> <u>Identifies whether the account service Smart Meter is billing with interval data.</u>

<u>RB</u>	<u>Rate Code Number (CA Implementation)</u> <u>Identifies an Energy Service Provider rate class</u>
SC	Shipper Car Order Number Special identifier for unmetered accounts. See REF02 for valid values.
<u>SPL</u>	<u>Standard Point Location Code (SPLC)</u> <u>(CA Implementation)</u> <u>Point at which the customer is connected to the transmission grid</u>
<u>SU</u>	<u>Special Processing Code (CA Implementation)</u> <u>Life support equipment verification. See REF02 for valid values.</u>
<u>TZ</u>	<u>Total Cycle Number (CA Implementation)</u> <u>Meter cycle. Cycle number when the meter will be read.</u>
YT	Reporter Identification Automatic Meter Reading (AMR) device identification number
<u>ZR</u>	<u>Supplier (Replacement) (CA Implementation)</u> <u>Billing/Metering package options for SDGE customers. For a connect setup, when the ESP selects an SDG&E owned, installed, and maintained meter, the IDR Meter can be read as: See REF02 for valid codes.</u>
<u>ZW</u>	<u>Area (CA Implementation)</u> <u>Congestion zone - a geographic area that requires power that exceeds the line capacity of the transmission system.</u>

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 18, valid values for REF02 are:

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

CA Implementation

When REF01 is 91, valid values for REF02 are:

- I - Interval
- L - Load Profile

CA Implementation

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:

- 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

When REF01 is SC, valid values for REF02 are:

- M - Metered
- U - Unmetered

When REF01 is PR, valid values for REF02 are:

MA = Applicable default rate with average monthly PX Pricing
HR = Hourly pricing in lieu of the otherwise applicable default utility rate.

When REF01 is QI valid values in REF02 are:

- A = Actual Read
- E = Estimated Read

When REF01 is SC, valid values for REF02 are:

- M - Metered
- U - Unmetered

(CA Implementation)

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

(CA Implementation)

When REF01 is ZR, valid values for REF02 are:

- BASIC = Basic Service
- NEXT = Next Day Service
- REAL = Real Time Service

(CA Implementation)

When REF01 is D8, valid values for REF02 are:

- P – Primary Service
- PS – Primary Substation
- S - Secondary Service
- T - Transmission Service

REF03 352 Description X AN 1/80

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

CA Implementation

When REF01 is LU, REF03 will contain the value for SDG&E's Service Delivery Point, with the following format:

'10' + '16609' + Premise id + Service Point id

where:

'10' indicates Electric Service

'16609' is SDG&E's id number for the Department of Energy

Premise id is the unique service address identifier including the suite #

Service Point is the location where metered or unmetered service is provided.

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: Entity Relationships

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			<u>7E</u> <u>Collector Identification (CA Implementation)</u>	
			<u>V9</u> <u>Meter reading service provider</u> <u>Subservicer (CA Implementation)</u>	
			<u>VA</u> <u>Meter owner</u> <u>Vessel Agent Number (CA Implementation)</u> <u>Meter Maintainer (MSP)</u>	
			<u>VE</u> <u>Vendor Abbreviation Code (CA Implementation)</u> <u>Meter Data Management Agent (MDMA)</u>	
			<u>VR</u> <u>Vendor ID Number (CA Implementation)</u> <u>Meter Installer</u>	
			<u>VS</u> <u>Vendor Order Number Suffix (CA Implementation)</u> <u>Scheduling Coordinator</u>	
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <u>(CA Implementation)</u> <u>When REF01 is 7E, V9, VA, VE, VR, VS, valid values for REF02 are:</u> <u>LDC - Utility Company</u> <u>ESP - Energy Service Provider</u> <u>CUSTOMER - Customer</u> <u>OTHER- Add Duns Number in REF03</u>	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: **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:

Notes: This convention of the REF segment is used to convey additional error information specific to a meter.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	<u>Des.</u>	<u>Element</u>		
	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 7G Data Quality Reject Reason Additional information about the error specific to the meter.	M ID 2/3
	REF02	127	Reference Identification A13 Other See explanation REF03.	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: **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:

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.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	<u>Des.</u>	<u>Element</u>		
	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	X AN 1/30
			NM1MQ Change Metering Location	
			PERAL Change Alternate Contact Information	
			PERIC Change Information Contact Information	
			REF18 Change Reading Estimation Method	
			REF4L Change Meter Service Voltage	
			REF4P Change Meter Constant/Multiplier	
			REF65 Change Meter Owner's Meter Read Cycle	
			REF7E Change Meter Reading Service Provider	
			REF91 Change Usage Calculation Code	
			REFD8 Change Distribution Loss Designator or Identifier	
			REFGE Change Customer Time Zone	
			REFIX Change Number of Dials on the Meter	
			<u>REFLO</u> <u>Change Load Profile (CA Implementation)</u>	
			<u>REFLU</u> <u>Change Location Number</u> <u>Change Service Delivery Point</u> <u>(CA Implementation)</u>	
			<u>REFMG</u> <u>Change Meter Number (CA Implementation)</u>	
			REFMT Change Meter Type	

		<u>REFNH</u>	<u>Change Utility Rate Class or Tariff (CA Implementation)</u>
		REFPL	Change Price List Number
		REFPR	Change Unit Pricing Category Under a Rate Code
		REFPRT	Change Type of Service
		REFQI	Change Actual or Estimated Reading
		<u>REFRB</u>	<u>Change ESP Rate (CA Implementation)</u>
		REFSC	Change Indicator for Unmetered Accounts
		REFSPL	Change the Point at which customer is connected to the transmission grid
		<u>REFSU</u>	<u>Change Special Processing Code (CA Implementation)</u>
		<u>REFTZ</u>	<u>Change of Meter Cycle (CA Implementation)</u>
		REFV9	Change Meter Owner
		<u>REFVA</u>	<u>Change Meter Maintainer (CA Implementation)</u>
		<u>REFVE</u>	<u>Change Meter Data Management Agent (MDMA) (CA Implementation)</u>
		<u>REFVR</u>	<u>Change Meter Installer (CA Implementation)</u>
		<u>REFVS</u>	<u>Change Scheduling Coordinator (CA Implementation)</u>
		REFYT	Change Automated Meter Reading (AMR) Device ID Number
		REFZR	Change Billing/Metering Options
		<u>REFZW</u>	<u>Change Congestion Zone (CA Implementation)</u>
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.

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M NO 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	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	