

Utility Industry Group Implementation Guideline

for

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

TRANSACTION SET

814

**General Request,
Response or Confirmation**

Ver/Rel 003070

Summary of Changes

June 4, 1998

Initial release.

© Utility Industry Group, 1998
All Rights Reserved

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).

814 General Request, Response or Confirmation

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 assigns 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 LIN Segment

- The UIG recommends that if multiple Customers are addressed in one 814, a separate LIN loop should be used for each Customer; i.e., one LIN per Customer, one Customer 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.

Use of The Detail LIN/REF Segment

- Two conventions for the Detail LIN/REF segment (position 030) are provided in this implementation guideline:
 - One to convey status reason codes in response to a Request
 - One to convey change reason codes in a Request for account maintenance

The segment may also be used to transmit a transaction reference number for the LIN loop. If the segment is used to transmit a transaction reference number for the LIN loop, this occurrence of the REF segment should be first, before any status reason or change reason codes.

- 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 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.

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.

814 General Request, Response or Confirmation

Functional Group ID=**GE**

Heading

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
Must Use	010	ST				
		Transaction Set Header	M	1		
Must Use	020	BGN				
		Beginning Segment	M	1		
LOOP ID - N1					>1	
Recomm	040	N1				N1
		Name	O	1		
	050	N2				
		Additional Name Information	O	2		
	060	N3				
		Address Information	O	2		
	070	N4				
		Geographic Location	O	1		
Recomm	080	PER				
		Administrative Communications Contact	O	>1		

Detail

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
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				N2
		Individual or Organizational Name	O	1		
	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

Pos. No.	Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	Notes and Comments
Must Use	150	SE				
		Transaction Set 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 customer in a consolidated third party Consumer Service Provider transaction.

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

Segment: **BGN** Beginning Segment
Position: 020
Loop:
Level: Heading:
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of a transaction set
Syntax Notes: 1 If BGN05 is present, then BGN04 is required.
Semantic Notes: 1 BGN02 is the transaction set reference number.
 2 BGN03 is the transaction set date.
 3 BGN04 is the transaction set time.
 4 BGN05 is the transaction set time qualifier.
 5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.
 6 BGN10 is related to the date in BGN03.

Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
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.	
			11 Response Signifies that the requested service will be addressed as described in this transaction.	
			13 Request	
			14 Advance Notification	
			CN Completion Notification 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	M AN 1/30
			A unique transaction identification number assigned by the originator.	
Must Use	BGN03	373	Date Date (YYMMDD) The transaction creation date.	M DT 6/6
	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.	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.	
Rec	BGN10	624	Century	O NO 2/2
			The first two characters in the designation of the year (CCYY)	
			The transaction creation century.	

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.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 8S Consumer Service Provider (CSP) The entity which provides services to the end use customer on behalf of another. In the deregulated, alternative energy supply environment, this is the Utility or other entity providing services on behalf of the Energy Service Provider. SJ Service Provider The entity which 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.	M ID 2/3
	N102	93	Name Free-form name	X AN 1/60
Must Use	N103	66	Identification Code Qualifier 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 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	X ID 1/2
Must Use	N104	67	Identification Code Code identifying a party or other code	X AN 2/20

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>
	<u>Des.</u>	<u>Element</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:

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Element</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: 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 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. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	O AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by 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

Segment: **PER Administrative Communications Contact**
Position: 080
Loop: N1
Level: Heading:
Usage: Recommended
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	
			IC Information Contact	
			SC Schedule Contact	
			An entity that schedules power flows.	
	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	
			TE Telephone	
	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	
			TE Telephone	
	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	
			TE Telephone	
	PER08	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	

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.
- 2 If either LIN06 or LIN07 is present, then the other is required.
- 3 If either LIN08 or LIN09 is present, then the other is required.
- 4 If either LIN10 or LIN11 is present, then the other is required.
- 5 If either LIN12 or LIN13 is present, then the other is required.
- 6 If either LIN14 or LIN15 is present, then the other is required.
- 7 If either LIN16 or LIN17 is present, then the other is required.
- 8 If either LIN18 or LIN19 is present, then the other is required.
- 9 If either LIN20 or LIN21 is present, then the other is required.
- 10 If either LIN22 or LIN23 is present, then the other is required.
- 11 If either LIN24 or LIN25 is present, then the other is required.
- 12 If either LIN26 or LIN27 is present, then the other is required.
- 13 If either LIN28 or LIN29 is present, then the other is required.
- 14 If either LIN30 or LIN31 is present, then the other is required.

Semantic Notes:

- 1 LIN01 is the line item identification

Comments:

- 1 See the Data Dictionary for a complete list of IDs.
- 2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
- 3

Notes:

A separate LIN loop is used for each customer, e.g., one LIN per customer, one customer 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.

Repeat Elements 235 and 234 as necessary to identify all of the services being requested/rendered.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	LIN01	350 Assigned Identification	O AN 1/20
		Alphanumeric characters assigned for differentiation within a transaction set A unique sequential number for each line item within this transaction set.	
Must Use	LIN02	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	Service Requested
		SV	Service Rendered
Must Use	LIN03	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
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.
EL	Electric Service Indicates a customer request to obtain electric service.
GAS	Gas Service Indicates a customer request to obtain gas service.
HU	Historical Usage Indicates an ESP request to obtain historical usage information for this customer.
MR	Meter Reading Indicates a customer request to obtain meter-reading services.
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 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.
ST	Steam Service Indicates a customer request to obtain steam service.
VL	Volunteer Indicates a customer request to volunteer for a pilot or phase-in of deregulation.
WA	Water Service Indicates a customer request to obtain water service.

Notes: If there are multiple services in the LIN segment and the primary service requested is accepted, it is still possible to reject a secondary service in REF~IP. For example, if an ESP requests both an enrollment of a customer (EL) and a special meter read (SR) and the enrollment is successful but the meter read cannot be performed, the Utility would accept the transaction and send a REF~1P~W09 which states that the special meter read cannot be performed.

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.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use ASI01	306	Action Code	M ID 1/2
		Code indicating type of action	
		7 Request	
		27 Moved - Follow Up	
		Used to designate a seamless transfer of ESP when a customer moves within a Utility's service territory.	
		A4 Pended	
		C Cancelled	
		U Reject	
		Inability to accept for processing due to the lack of required information	
		V Respond	
		WQ Accept	
Must Use ASI02	875	Maintenance Type Code	M ID 3/3
		Code identifying the specific type of item maintenance	
		001 Change	
		002 Delete	
		021 Addition	
		Use when requesting and confirming a new service.	
		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 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.

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128 Reference Identification Qualifier	M ID 2/3
		Code qualifying the Reference Identification	
		1P Accessorial Status Code	Used in the instance where the 814 Request is accepted, but additional status information needs to be provided; e.g., code W09, special off-cycle meter read cannot be performed.
		7G Data Quality Reject Reason	Used in the instance where the 814 Request is rejected.
		NU Pending Case	
		TN Transaction Reference Number	Used to provide a unique identification number for the Request for this Customer. This use of the REF segment should be the first occurrence if more than one REF is sent.
	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	
		The following codes have been identified by the UIG to convey status reason codes. Other codes from data element 641 may be used by agreement of the trading partners when necessary.	
		007 Excessive Obligations - Same Income, Including Habitual Nonpayment of Debts	Service terminated because of nonpayment
		008 Abandonment of Property	Account exists but is not active
		017 Business Failure	Service terminated because the Service Provider went out of business
		020 Moved - Vacated	Service terminated because the Customer moved
		023 Servicing Problems	Cannot access the meter
		027 Payment Dispute	

A03	Incorrect Address Invalid meter address
A13	Other See explanation in REF03
A75	Invalid Account Format
A76	Account Not Found
A77	Name Specified Does Not Match Account
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
A82	Address Specified Does Not Match Account
A83	Unauthorized or Invalid Action
A91	Exceeds Service Limitations Service is not offered at Customer's location
A95	Past Cutoff Time Offer expired
ABN	Abnormal Duplicate request received
ANL	Agent Not Licensed Service Provider not licensed to provide the requested service
API	Application Incomplete Required information missing. See REF03 for details.
B04	Held for Payment Requested service will not be completed until outstanding payment is made
B14	Missing Documents Reason for termination is required but was not furnished
B30	Currently Enrolled Requested action cannot be taken
B31	Not Currently Enrolled Requested action cannot be taken
B33	Unreported - Information is not available in record Customer name is missing from the Request
B38	Dropped Customer was terminated by the Service Provider for reasons other than nonpayment
C02	Credit Hold Customer is on credit hold
CHA	Changed Agent Customer changed to another Service Provider
D30	Declined Services Requested service has been declined

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	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 AMT7N Change Percentage of Service Supplied AMTDP Change Percentage of Service Tax Exempt DTM007 Change Effective Date DTM129 Change Customer Contract Effective Date DTM150 Change Service Period Start Date DTM151 Change Service Period End Date DTM243 Change Actual Complete Date DTM245 Change Estimated Completion Date DTM802 Change Date of Action NM12C Change Third Party Name/Address NM18R Change Name on Service Address NM1BT Change Bill-to Party Name/Address NM1BY Change Centralized Management or Accounts Payable Name/Address NM1FE Change Mailing Address NM1PK Change Party to Receive Copy Name/Address PERAL Change Alternate Contact Information PERIC Change Information Contact Information PM01 Change DFI Identification Number PM02 Change Account Number PM05 Change Account Number Qualifier	X AN 1/30

PM06	Change DFI ID Number Qualifier
REF06	Change System Number (Permanent Key Account Number)
REF0B	Change ESP's License or Registration Number
REF11	Change Non-utility Trading Partner-assigned Account Number for the End Use Customer
REF12	Change Utility-assigned Account Number for the End Use Customer
REF18	Change Reading Estimation Method
REF4L	Change Meter Service Voltage
REF5B	Change ESP-assigned Account Number for the Utility
REF7E	Change Meter Reading Service Provider
REF9V	Change Payment Option
REFBF	Change Billing Cycle
REFBLT	Change Billing Type
REFD8	Change Distribution Loss Designator
REFH5	Change Renewable Energy Provider
REFK0	Change Approval Code
REFKW	Change Certification Number
REFLO	Change Load Profile
REFLU	Change Location Number
REFMG	Change Meter Number
REFMT	Change Meter Type
REFO8	Change New Premise Indicator
REFPC	Change Party that Calculates the Bill
REFPL	Change Price List Number
REFPR	Change Unit Pricing Category under a Rate Code
REFRB	Change Rate or Tariff
REFS0	Change Release of Confidential Information Indicator
REFSPL	Change Point at which the Customer is Connected to Transmission Grid
REFSR	Change Service Relationship
REFST	Change Customer Reference Number
REFSU	Change Special Processing Code
REFTZ	Change of Meter Cycle
REFU0	Change ESP Transaction Number
REFV9	Change Meter Owner
REFYG	Change Meter Installer or Maintainer
REFYT	Change Automated Meter Reading (AMR) Device ID Number
REFZW	Change the Congestion Zone

REF03 352 Description X AN 1/80

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

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

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374 Date/Time Qualifier	M ID 3/3
		Code specifying type of date or time, or both date and time	
		007 Effective	
		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.	
		243 Actual Complete	
		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.	
	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 DTM06 1250 Date Time Period Format Qualifier X ID 2/3

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

D6 Date Expressed in Format YYMMDD
 D8 Date Expressed in Format CCYYMMDD
 DT Date and Time Expressed in Format CCYYMMDDHHMM
 RD6 Range of Dates Expressed in Format YYMMDD-YYMMDD
 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 DTM07 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:

Notes: This segment is used to specify (1) the percentage of a customer's energy requirements that will be provided by the ESP and/or (2) the percentage of the customer's energy service that is exempt from taxation.

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/2
			Code to qualify amount	
			7N Participating Interest	
			DP Exemption	
			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.	
			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.	
Must Use	AMT02	782	Monetary Amount	M R 1/15
			Monetary amount	
			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 LIN03, LIN05 or LIN07.

Data Element Summary

Ref.	Data Element	Name	Attributes
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	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 the customer has requested and authorized electronic debits or credits.	M ID 1/1
		Y 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 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.	

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:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	NM101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			2C Co-Participant A third party who shares responsibility for payment of the customer's bill.	
			8R Consumer Service Provider (CSP) Customer Identifies the customer associated with the service account identified in the NM1/REF segment. The N3 and N4 segments in the NM1 loop qualified by 8R specify the service address.	
			BT Bill-to-Party Used to identify a billing address for the customer associated with the service account identified in the NM1/REF segment.	
			BY Buying Party (Purchaser) Used to identify a centralized management or accounts payable location responsible for the location identified by '8R'.	
			FE Mail Address Used if customer has an additional address on file that is not the service or billing address.	
			PK Party to Receive Copy A third party, named by the customer or the customer's representative, who is to receive copies of all notices or correspondence to the customer.	
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 and transmitted via NM103, NM104, NM105, NM106 and NM107.	
			2 Non-Person Entity The entity name is not segmented and will be transmitted in NM103 only.	
			3 Unknown The entity name is not segmented and will be transmitted in NM103 only.	

NM103	1035	Name Last or Organization Name	O	AN 1/35
		Individual last name or organizational name		
NM104	1036	Name First	O	AN 1/25
		Individual first name		
NM105	1037	Name Middle	O	AN 1/25
		Individual middle name or initial		
NM106	1038	Name Prefix	O	AN 1/10
		Prefix to individual name		
NM107	1039	Name Suffix	O	AN 1/10
		Suffix to individual name		
NM108	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		
		24 Employer's Identification Number		
		34 Social Security 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)		
NM109	67	Identification Code	X	AN 2/20
		Code identifying a party or other code		

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>
	<u>Des.</u>	<u>Element</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>Element</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
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. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	O AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by 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

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

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Must Use</u>	<u>Des.</u>	<u>Element</u>		
	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	M ID 2/3
			Code qualifying the Reference Identification	
			06 System Number	
			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.	
			0B State License Number	
			Energy Service Provider License or Registration number	
			11 Account Number	
			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.	
			12 Billing Account	
			Utility-assigned account number for end use customer.	
			18 Plan Number	
			Reading estimation method. The estimation rules applied to estimate values for missing data. See REF02 for valid values.	
			45 Old Account Number	
			Previous utility-assigned account number for the end use customer.	
			46 Old Meter Number	
			Identifies meters being removed	
			4L Location-specific Services Reference Number	
			Meter service voltage	

5B	Supplemental Account Number Energy Service Provider-assigned account number for the utility.
7E	Collector Identification Meter reading service provider
9V	Payment Category Payment Option
BF	Billing Center Identification Billing cycle. Cycle number (1-21) when the billing will be rendered.
BLT	Billing Type Identifies the party that is to render the bill to the customer. See REF02 for valid values.
D8	Loss Report Number Distribution loss designator or identifier
H5	Special Clause Renewable Energy Provider. Indicates that renewable energy is provided for this account. See REF02 for valid values.
IX	Item Number Number of dials on the meter
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
LO	Load Planning Number Load profile
LU	Location Number Identification number for the point where service is delivered to the customer.
MG	Meter Number Meter ID Serial Number
MT	Meter Ticket Number Meter Type
NH	Rate Card Number Identifies a utility rate class or tariff
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	Production Code Identifies the party that is to calculate the charges on the bill. See REF02 for valid values.
PL	Price List Number
PR	Price Quote Number Identifies a unit pricing category under a rate code
RB	Rate code number Identifies an Energy Service Provider rate class

S0	Special Approval Indicates the extent to which the customer has authorized the release of confidential information. See REF02 for valid values.
SPL	Standard Point Location Code (SPLC) Point at which the customer is connected to the transmission grid
SR	Sales Responsibility Service relationship
ST	Store Number An internal reference number meaningful to the customer
SU	Special Processing Code
TZ	Total Cycle Number Meter Cycle. Cycle number (1-21) when the meter will be read.
U0	Consolidator's Receipt Number Energy Service Provider transaction number
V9	Subservicer Meter owner
YG	Operator Identification Meter installer or maintainer
YT	Reporter Identification Automatic Meter Reading (AMR) device identification number
ZW	Area Congestion zone - a geographic area that requires power that exceeds the line capacity of the transmission system.

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 - California's Metering and Data Access Working Group method

When REF01 is BLT, valid values for REF02 are:

- LDC - The Utility bills the customer
- ESP - The ESP bills the customer
- DUAL - Both parties bill 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 K0, valid values for REF02 are:

- Y - Acknowledgment Received
- N - Acknowledgment Not Received

When REF01 is O8, valid values for REF02 are:

- Y - Yes, this is a new premise
- N - No, this is not a new premise

When REF01 is PC, valid values for REF02 are:

LDC - The Utility calculates the charges on the bill

ESP - The ESP calculates the charges on the bill

DUAL - Both parties calculate their 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

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>Element</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	