

Illinois

Implementation
Guide
For
Electronic
Data
Interchange

Transaction Set
ANSI ASC X12 Version 004010

814
Change Request
Version 1.0

January 6, 2009
Version 1.0

Summary of Changes

- Initial Release.

Implementation Notes

Uses for the 814 Change Transaction	<ul style="list-style-type: none">• The 814 Change Request may be used by the RES only to send changes to the Utility for the following data:<ul style="list-style-type: none">○ RES Account Number○ Bill Option and Payment Option○ RES Rate Code for Rate Ready Utility Consolidated Billing○ MISO CP Node• The 814 Change Request may be used by the Utility to send changes to the current RES or the Pending RES for the following data:<ul style="list-style-type: none">○ Customer Name, Address and/or Telephone Number○ Billing Party Name and/or Address○ Bill Option and Payment Option○ Service Period Start and/or End Dates○ Service Point Additions or Removals○ Peak Load Contribution (PLC)○ Transmission Contribution (NSPL)○ Supply Group○ Meter Additions, Removals and Exchanges○ Meter Attributes (including Number of Dials, Meter Constant, Type of Metering, Meter Role and Special Meter Configuration)○ Utility Rate Class○ Load Profile○ Voltages (Service, Delivery or Meter)
Transaction Reference Numbers	<ul style="list-style-type: none">• On the Request, the Transaction Reference Number in the BGN02 must be unique over time. This number will be returned in the BGN06 of the Response transaction.
LIN01 Reference Numbers	<ul style="list-style-type: none">• On the Request, the identifier in the LIN01 element either by itself, or in conjunction with the BGN02 element from the BGN segment, must uniquely identify each LIN request item over time. This number will be returned on the Response transaction in the same element.
New Information Always Provided	<ul style="list-style-type: none">• In all circumstances, only the new information is provided in the 814 Change transaction. For example, if a RES sends an 814 Change to change the RES Account Number, the new number will be populated in the REF*11 Segment. If a Utility sends an 814 Change to change the Service Address, only the new service address will be populated in the N1*8R Loop.
Reason for Change Codes	<ul style="list-style-type: none">• To simplify the implementation, all Reason for Change codes are included in the LIN Loop REF*TD segment (Detail Position 030).
Definition of Mass Market Customers	<ul style="list-style-type: none">• Ameren Mass Market - Includes any account containing one or more of only the following types of service point: DS-1 (residential), DS-2 (small commercial < 150 kW) or DS-5 (lighting).• ComEd Mass Market – Includes all residential and commercial customers under 100 kW.
Definition of Service Point	<ul style="list-style-type: none">• Ameren’s systems operate at a Service Point level. A service point consists of metered or unmetered load that is assigned to a specific Ameren rate. A service point containing metered load can have one or more meters associated with it. An Ameren account may have multiple electric service points associated with it. For Mass Market accounts, the RES is required to take all service points on the account that is being enrolled. For Non-Mass Market accounts, the RES may choose which Service Points to serve. It is important to follow the

Implementation of
Service Point for 814
Change (Ameren)

requirements in each Implementation Guide to differentiate when a Service Point Identifier may or may not be sent.

- ComEd operates at an Account Level only.
- Ameren Mass Market Reinstatement
 - The Service Point Identifier (NM1/REF*LU) will only be sent by Ameren to the RES when the change relates to information that must be associated with a service point (for example, service point addition, meter changes, utility rate class, etc.).
- Ameren Non-Mass Market Reinstatement
 - Ameren to RES: The Service Point Identifier (NM1/REF*LU) will be sent on the Request transaction, and may optionally be included on the Response transaction.
 - RES to Ameren: The Service Point Identifier may be included for a change in RES Rate Code or CP Node. It may not be included for a change in Bill Option or RES Account Number.

814 General Request, Response or Confirmation

Functional Group ID=**GE**

Introduction:

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

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>
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
						LOOP ID - N1	>1
	040	N1	Name	O	1		n1
	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
	010	LIN	Item Identification	O	1		
	020	ASI	Action or Status Indicator	O	1		
	030	REF	Reference Identification	O	>1		
	040	DTM	Date/Time Reference	O	>1		
	060	AMT	Monetary Amount	O	>1		
						LOOP ID - NM1	>1
	080	NM1	Individual or Organizational Name	O	1		n2
	130	REF	Reference Identification	O	>1		
M	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 consumer 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) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:
Notes: Required
 ST~814~000000001

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</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:

Notes:

Required
 BGN~13~20091216-ABC.000001~20091216

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 13 Request	M ID 2/2
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 must be unique over time. Transaction Reference Numbers will only contain uppercase letters (A to Z), digits (0 to 9), dashes (-) and periods (.). Note that all other characters (spaces, underscores, etc.) must be excluded.	M AN 1/30
Must Use	BGN03	373	Date Date expressed as CCYYMMDD The transaction creation date - the date that the data was processed by the sender's application system.	M DT 8/8

Segment: **N1** Name (Utility)
Position: 040
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used 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.
Notes: Required
 N1~8S~UTILITY NAME~1~007909411

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) Utility	M ID 2/3
Must Use	N102	93	Name Free-form name Utility 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	X ID 1/2
Must Use	N104	67	Identification Code Code identifying a party or other code Utility D-U-N-S or D-U-N-S+4 Number	X AN 2/80

Segment: **N1** Name (Retail Electric Supplier)
Position: 040
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used 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.
Notes: Required
 N1~SJ~RES COMPANY~1~049612345

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
Must Use	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		SJ Service Provider	
		Retail Electric Supplier (RES)	
Must Use	N102	93 Name	X AN 1/60
		Free-form name	
		RES Name	
Must Use	N103	66 Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67 Identification Code	X AN 2/80
		Code identifying a party or other code	
		RES D-U-N-S or D-U-N-S+4 Number	

Segment: **N1** Name (Customer)
Position: 040
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:

- 1 At least one of N102 or N103 is required.
- 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:
Comments:

- 1 This segment, used 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.

Notes: Required - The customer name is required on all transactions, however, only the Utility may send an 814 Change to change the customer's name.
N1~8R~CUSTOMER NAME

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 8R	M ID 2/3 Consumer Service Provider (CSP) Customer Customer Name
Must Use	N102	93	Name Free-form name Customer Name	X AN 1/60

Segment: N3 Address Information (Service Address)
Position: 060
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:
Notes:

RES to Utility: Not Used
 Utility to RES: Required if there is a change to the service address stored in the Utility's system. This is not to be used to change a customer's premise (i.e., customer move).
 N3~3921 MAIN STREET~APT 4

Data Element Summary

	Ref.	Data	Attributes
	<u>Des.</u>	<u>Element</u> <u>Name</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 (Service Address)**
Position: 070
Loop: N1 Optional
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: RES to Utility: Not Used
 Utility to RES: Required if there is a change to the service address stored in the Utility's system. This is not to be used to change a customer's premise (i.e., customer move).
 N4~ANYTOWN~IL~30012

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N401	19	City Name Free-form text for city name	O AN 2/30
Must Use	N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
Must Use	N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O ID 3/15

Segment: **PER Administrative Communications Contact**
Position: 080
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: >1
Purpose: To identify a person or office to whom administrative communications should be directed
Syntax Notes:

- 1 If either PER03 or PER04 is present, then the other is required.
- 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:

Notes:

RES to Utility: Not Used
 Utility to RES: Required if the Customer's Telephone Number changes.
 PER~IC~OPTIONAL NAME~TE~3125551212 x1234

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named IC Information Contact	M ID 2/2
	PER02	93	Name Free-form name	O AN 1/60
Must Use	PER03	365	Communication Number Qualifier Code identifying the type of communication number TE Telephone	X ID 2/2
Must Use	PER04	364	Communication Number Complete communications number including country or area code when applicable Customer Telephone Number	X AN 1/80

Segment: **N1** Name (Billing Address)
Position: 040
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:

- 1 At least one of N102 or N103 is required.
- 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:
Comments:

- 1 This segment, used 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.

Notes:

RES to Utility: Not Used
Utility to RES: Required to change the Billing Party Name and/or Address, otherwise, Not Used
N1~BT~BILLING PARTY NAME

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 BT Bill-to-Party	M ID 2/3
Must Use	N102	93	Name Free-form name Billing Party Name	X AN 1/60

Segment: N3 Address Information (Billing Address)
Position: 060
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:
Notes:

RES to Utility: Not Used
 Utility to RES: Required to change the Billing Party Name and/or Address, otherwise,
 Not Used
 N3~PO BOX 4881

Data Element Summary

	Ref.	Data	Attributes
	<u>Des.</u>	<u>Element</u> <u>Name</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 (Billing Address)**
Position: 070
Loop: N1 Optional
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: RES to Utility: Not Used
Utility to RES: Required to change the Billing Party Name and/or Address, otherwise, Not Used
N4~ANYTOWN~IL~30012

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N401	19	City Name Free-form text for city name	O AN 2/30
Must Use	N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
Must Use	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:	LIN Item Identification
Position:	010
Loop:	LIN Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify basic item identification data
Syntax Notes:	<ol style="list-style-type: none"> 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:	<ol style="list-style-type: none"> 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.
Notes:	Required - All 814 transactions will contain only one LIN Loop. LIN~1~SH~EL~SH~CE

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	LIN01	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set On the Request, identifier supplied in this element either by itself or in conjunction with the BGN02 element from the BGN segment must uniquely identify each LIN request item over time. This number will be returned on the Response transaction in the same element.	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) SH Service Requested	M ID 2/2
Must Use	LIN03	234	Product/Service ID Identifying number for a product or service EL Electric	M AN 1/48
Must Use	LIN04	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SH Service Requested	X ID 2/2
Must Use	LIN05	234	Product/Service ID Identifying number for a product or service CE Energy Services	X AN 1/48

Segment: **ASI** Action or Status Indicator
Position: 020
Loop: LIN Optional
Level: Detail
Usage: Optional
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:

Required
ASI~7~001

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ASI01	306	Action Code Code indicating type of action 7 Request	M ID 1/2
Must Use	ASI02	875	Maintenance Type Code Code identifying the specific type of item maintenance 001 Change	M ID 3/3

Segment: **REF** Reference Identification (Reason for Change)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

Required

This segment is used to convey the reason for the 814 Change transaction. Note that all reason codes are included in this segment for both the LIN level information and also the NM1 level information.

There are some circumstances where multiple reason for change codes may be provided, for example the Bill Presenter, Bill Calculator, Payment Option and RES Rate Code if switching from Dual billing to Utility Rate Ready Consolidated Billing.

Other than those situations where the changes are necessary to be sent together, separate 814s must be sent. For example, if the RES changes its account number at the same time as the Bill Option, there must be two separate 814 Change transactions.
REF~TD~REFBF

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
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier AMTKC Change Peak Load Contribution (PLC) AMTKZ Change Transmission Contribution (NSPL) DTM150 Change Service Period Start Date DTM151 Change Service Period End Date N18R Change Customer Name, Service Address and/or Telephone Number N1BT Change Billing Party Name and/or Service Address NM1MA Meter Addition NM1MQ Change Meter Attributes <div style="background-color: #e0e0e0; padding: 5px; margin: 5px 0;">This code is used to change the meter attributes, including Number of Dials, Meter Constant, Type of Metering, Meter Role and Special Meter Configuration. All applicable segments will be included in the 814 Change transaction.</div> NM1MR Meter Removal NM1MX Meter Exchange NM1SA Service Point Addition NM1SR Service Point Removal REF11 Change RES Account Number REF4L Change Meter Voltage	X AN 1/30

REF9V	Change Payment Option
REFBF	Change Bill Cycle
REFBLT	Change Bill Presenter
REFCP	Change MISO CP Node
REFKK	Change Delivery Voltage
REFLO	Change Load Profile
REFNH	Change Utility Rate Class
REFNR	Change Utility Budget Billing Status
REFPC	Change Bill Calculator
REFPTC	Change Supply Group
REFRB	Change RES Rate Code
REFSV	Change Supply Voltage

Segment: **REF** Reference Identification (RES Account Number)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Required if changing RES Account Number, otherwise Optional
Utility to RES: Required if provided on the 814 Enrollment or Change transaction.

Only one RES Account Number may be assigned to each Utility Account Number (RES Account Numbers may not be assigned for each Service Point on the account).
REF~11~1234567890

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 11 Account Number Retail Electric Supplier (RES) Account Number	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier RES Account Number	X AN 1/30

Segment: **REF** Reference Identification (Utility Account Number)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: Required
 Both utilities currently have 10 digit account numbers. All 10 digits, including leading zeros must be provided.
 REF~12~0000445648~NONPOR

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 12 Billing Account Utility Account Number	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Utility Account Number	X AN 1/30
Dep	REF03	352	Description A free-form description to clarify the related data elements and their content RES to Utility: Not Used Utility to RES: Required This code indicates the current class of customer in regards to the POR Eligibility groups as of the time the transaction is sent. GROUPA Ameren or ComEd POR Eligibility Group A GROUPB Ameren or ComEd POR Eligibility Group B GROUPE ComEd POR Eligibility Group C NONPOR Account Not Eligible for POR (Ameren or ComEd)	X AN 1/80

Segment: **REF** Reference Identification (Bill Presenter)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: Required if changing the bill option. REF*BLT, REF*PC and REF*9V must all be sent for every bill option change.
REF~BLT~DUAL

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 BLT Billing Type Bill Presenter	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DUAL The Utility and RES both Present Bills to the Customer ESP RES Presents the Consolidated Bill to the Customer LDC Utility Presents the Consolidated Bill to the Customer Used for both Rate Ready and Bill Ready Utility Consolidated Billing	X AN 1/30

Segment: **REF** Reference Identification (Bill Calculator)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: Required if changing the bill option. REF*BLT, REF*PC and REF*9V must all be sent for every bill option change.
REF~PC~DUAL

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 PC Production Code Bill Calculator	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DUAL Each party calculates its own charges LDC The Utility calculates the RES charges Used for Rate Ready Utility Consolidated Billing	X AN 1/30

Segment: **REF** Reference Identification (Payment Option)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: Required if changing the bill option. REF*BLT, REF*PC and REF*9V must all be sent for every bill option change.

At this time, if signing a customer up for Utility Consolidated Billing, this segment must be sent and indicate "Y" for POR. Otherwise, the "N" should be sent. There is no circumstance, until a stand-alone UCB is created, that there would be change to the REF*9V segment without a corresponding change to the bill option.
REF~9V~Y

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			9V	Payment Category
				Indicates whether the customer is to be part of the Purchase of Receivables (POR) program.
Must Use	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	
			N	Customer should NOT be signed up for the POR program.
			Y	Customer should be signed up for the POR program.

Segment: **REF** Reference Identification (Bill Cycle)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES: Required if changing the Bill Cycle, otherwise Not Used
 REF~BF~07

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 BF Billing Center Identification Bill Cycle	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Bill Cycle	X AN 1/30

Segment: **REF** Reference Identification (MISO CPNode)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: RES to Ameren: Required if changing the MISO CP Node, otherwise Not Used
Ameren to RES: Not Used
ComEd: Not Used

The MISO CP Node may be assigned by Service Point for Ameren, which would require that separate 814 Change transactions be sent for each MISO CP Node with the applicable Service Points included in each transaction.
REF~CP~~AMIL.BGS2

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 CP	M ID 2/3 Condition of Purchase Document Number
Must Use	REF03	352	Description A free-form description to clarify the related data elements and their content MISO CPNode	X AN 1/80

Segment: **REF** Reference Identification (Supply Group)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 ComEd to RES: Required if changing the Supply Group, otherwise Not Used
 Ameren: Not Used

 Customer supply groups are designations for retail customers located in the Company's service territory so that retail customers can be categorized for the purposes of computing charges for the procurement of electric power and energy and applying such charges to retail customers. Please see the ComEd tariff for additional details.
 REF~PTC~~Self-Generating

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 PTC Patent Type Supply Group	M ID 2/3
Must Use	REF03	352	Description A free-form description to clarify the related data elements and their content Supply Group	X AN 1/80

Segment: **REF** Reference Identification (Budget Billing Status)
Position: 030
Loop: LIN Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES: Used to change the Utility Budget Billing Status
 REF~NR~Y

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 NR Progress Payment Number Utility Budget Billing Status	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier N Customer Does Not Participate in Budget Billing for Utility Charges Y Customer Participates in Budget Billing for Utility Charges	X AN 1/30

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

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

RES to Utility: Not Used
 Utility to RES: Required if changing the Service Period Start Date
 DTM~150~20100515

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 150 Service Period Start	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD Service Period Start Date	X DT 8/8

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

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

RES to Utility: Not Used
 Utility to RES: Required if changing the Service Period End Date
 DTM~151~20100515

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 151 Service Period End	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD Service Period End Date	X DT 8/8

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

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:
Comments:

Notes: RES to Utility: Optional to provide a Requested Date for a Bill Option Change or MISO CP Node Change.
Utility to RES: Required to provide the effective date for all except Date Change Requests.

The same DASR rules apply for Bill Option changes as Enrollments in regards to timing. The DTM*152 from the RES to the Utility essentially is a "Change no earlier than" date. DTM~152~20100515

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 152 Effective Date of Change	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD Effective Date of Change	X DT 8/8

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

Ameren: Not Used
 ComEd to RES: Required if changing the PLC, otherwise Not Used
 RES to ComEd: Not Used

 Zero values may be sent if the utility is, in fact, stating that there is no contribution for this customer's account.
 AMT~KC~99.99999

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code Code to qualify amount KC Obligated	M ID 1/3
Must Use	AMT02	782	Monetary Amount Monetary amount Peak Load Contribution (PLC)	M R 1/18

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

Utility to RES: Required if Changing the NSPL, otherwise Not Used
 RES to Utility: Not Used

 Zero values may be sent if the utility is, in fact, stating that there is no contribution for this customer's account.
 AMT~KZ~752

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code Code to qualify amount KZ Mortgagor's Monthly Obligations	M ID 1/3
				Transmission Contribution: Customer's contribution to the Transmission System's annual peak load. Also known as Network Service Peak Load (NSPL).
Must Use	AMT02	782	Monetary Amount Monetary amount Transmission Contribution	M R 1/18

Segment: **NM1 Individual or Organizational Name (Meter Information)**
Position: 080
Loop: NM1 Optional
Level: Detail
Usage: Optional
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.
 2 If NM111 is present, then NM110 is required.
Semantic Notes: 1 NM102 qualifies NM103.
Comments: 1 NM110 and NM111 further define the type of entity in NM101.
Notes: RES Account Number Change: Not Used
 Bill Option Change - RES to Utility: Required for Rate Ready, otherwise Not Used
 Bill Option Change - ComEd to RES: Not Used
 Bill Option Change - Ameren to RES: Required for Rate Ready, Required for Non-Mass Market accounts, otherwise Not Used.
 RES Rate Code Change: RES to Utility - Required
 RES MISO CP Node Change (Ameren Only): Optional - One 814 per MISO CP Node
 All Ameren to RES Non-Mass Market: Required
 Ameren to RES Mass Market: Required for changes in NM1 level data (Service Points, Meters, Rate Class, Load Profile, Meter Attributes, Voltages) otherwise, Not Used
 ComEd to RES: Required for changes in NM1 level data (Service Points, Meters, Rate Class, Load Profile, Meter Attributes, Voltages) otherwise, Not Used
 NM1~MQ~3~~~~~32~MG000001
 NM1~MQ~3~~~~~32~UNMETERED
 NM1~MQ~3~~~~~32~ALL

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	NM101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		MA	Party for whom Item is Ultimately Intended Meter Addition - One NM1 Loop will be sent for each Meter and/or one for the Unmetered Services being added to the Account/Service Point to be served by the RES.
		MQ	Metering Location This code is used when changing Meter Level (NM1) Information or Attributes for an existing Meter.
		MR	Medical Insurance Carrier Meter Removal - One NM1 Loop will be sent for each Meter and/or one for the Unmetered Services being removed from the Account/Service Point served by the RES.
		MX	Juvenile Witness Meter Exchange - One NM1 Loop will be sent for each Meter being exchanged on the Account/Service Point served by the RES.
		SA	Salvage Carrier Service Point Addition - Used by Ameren to notify the RES that a Service Point is being added to an account and is to be served by the RES. One NM1 Loop will be sent for each Meter and/or one for the Unmetered Services that are being added as a result of the addition of the Service Point.

SR

When an 814 Change is sent for Service Point Addition, there will not be an 814 Change for a Meter Addition.

Samples to be Returned To

Service Point Removal - Used by Ameren to notify the RES that a Service Point being served by the RES is being removed from an account. One NM1 Loop will be sent for each Meter and/or one for the Unmetered Services that are being removed as a result of the removal of the Service Point.

When an 814 Change is sent for Service Point Removal, there will not be an 814 Change for a Meter Removal.

Must Use	NM102	1065	Entity Type Qualifier	M	ID 1/1
			Code qualifying the type of entity		
			3 Unknown		
Must Use	NM108	66	Identification Code Qualifier	X	ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)		
			32 Assigned by Property Operator		
			Meter Number		
Must Use	NM109	67	Identification Code	X	AN 2/80
			Code identifying a party or other code		
			Meter Number or the literals "UNMETERED" or "ALL"		
			"ALL" must be used when a RES is sending a change to a RES Rate Code, or when a Utility is sending a change to account, service point or meter level data which is not meter specific (For Example, Utility Rate Class or Load Profile on a Service Point).		

Segment: **REF** Reference Identification (Service Point Identifier)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

ComEd: Not Used

RES to Ameren:
RES Account Number Change: Not Used
Bill Option Change: Not Used
MISO CP Node Change (Ameren Only): Optional for Non-Mass Market accounts - One 814 per MISO CP Node
RES Rate Code Change: Optional for Non-Mass Market accounts to assign a rate code by Service Point

Ameren to RES - Mass Market:
Changes in NM1 level data: Required
Service Point Addition/Removal
Meter Addition, Removal, Exchange
Rate Class
Load Profile
Meter Attributes
Voltages.
All Other Changes (i.e., Account Level): Not Used

Ameren to RES - Non-Mass Market: Required

Ameren currently uses an 8-digit Service Point number. All 8 digits, including leading zeros must be provided.

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 LU Location Number Service Point Identifier	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Service Point Identifier	X AN 1/30

Segment: **REF** Reference Identification (Old Meter Number)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES: Required for a Meter Exchange, otherwise, Not Used
 REF~46~GE001983M

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 46 Old Meter Number	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Old Meter Number	X AN 1/30

Segment: **REF** Reference Identification (Rate Class)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Change of Rate Class: Required
 Service Point Addition: Required
 Meter Addition: Required
 Meter Exchange: Required
 All other transactions: Not Used
 REF~NH~DS1~Retail Delivery Service - 0 to 100 kW

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 NH Rate Card Number Utility Rate Class	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Utility Rate Class	X AN 1/30
	REF03	352	Description A free-form description to clarify the related data elements and their content Text Description of Utility Rate Class	X AN 1/80

Segment: **REF** Reference Identification (Load Profile)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Change of Load Profile: Required
 Service Point Addition: Required
 Meter Addition: Required
 Meter Exchange: Required
 All other transactions: Not Used
 REF~LO~33

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			LO Load Planning Number	
			Load Profile	
Must Use	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	
			Load Profile	

Segment: **REF** Reference Identification (RES Rate Code)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Ameren: Required if Changing Bill Option or RES Rate Code, otherwise, Not Used.
Ameren to RES: Not Used
ComEd: Not Used

To change all Service Points on the account to the same RES Rate Code, do not include the Service Point Identifier (REF*LU) segment.
REF~RB~123ABC

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 RB Rate code number RES Rate Code	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier RES Rate Code	X AN 1/30

Segment: **REF** Reference Identification (Type of Metering)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Service Point Addition: Required
 Meter Addition: Required
 Meter Exchange: Required
 All other transactions: Not Used

There will be one REF***TU** segment for each Type of Metering that will be sent on the 867 Monthly or Interval Usage transaction. Included in the REF03 is the Meter Type, which is made up of the Type of Consumption plus the Metering Interval.

This segment is provided for unmetered services and will reflect what is shown in the 867 (e.g., KHMON).

Type of Consumption	Metering Interval
K1 - kW	030
K3 - kVARH	060
KH - kWh	MON

For Example:
 REF~**TU**~41~KHMON
 REF~**TU**~42~KHMON
 REF~**TU**~51~KHMON
 REF~**TU**~41~K1MON
 REF~**TU**~42~K1MON
 REF~**TU**~51~K1MON

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 TU Trial Location Code	M ID 2/3
				Type of Metering Information that will be sent on the 867 Usage Transaction.	
Must Use	REF02	127	Reference Identification	Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier 41 Off Peak 42 On Peak 51 Totalizer	X AN 1/30
Must Use	REF03	352	Description	A free-form description to clarify the related data elements and their content Meter Type	X AN 1/80

Segment: **REF** Reference Identification (Supply Voltage)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Ameren to RES:
 Change of Supply Voltage: Required
 Service Point Addition: Required
 Meter Addition: Required
 Meter Exchange: Required
 All other transactions: Not Used
 ComEd: Not Used
 REF~SV~PRIMARY

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 SV Service Charge Number Supply Voltage	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier ABOVE100KV HIGHVOLTAGE PRIMARY SECONDARY	X AN 1/30

Segment: **REF** Reference Identification (Delivery Voltage)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Ameren to RES:
 Change of Delivery Voltage: Required
 Service Point Addition: Required
 Meter Addition: Required
 Meter Exchange: Required
 All other transactions: Not Used
 ComEd: Not Used
 REF~KK~HIGHVOLTAGE

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 KK Delivery Reference Delivery Voltage	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier ABOVE100KV HIGHVOLTAGE PRIMARY SECONDARY	X AN 1/30

Segment: **REF** Reference Identification (Meter Voltage)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Ameren to RES:
 Change of Meter Voltage: Required
 Service Point Addition: Required (except for Unmetered Services)
 Meter Addition: Required (except for Unmetered Services)
 Meter Exchange: Required (except for Unmetered Services)
 All other transactions: Not Used
 ComEd: Not Used
 REF~4L~SECONDARY

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 4L Location-specific Services Reference Number Meter Voltage	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier ABOVE100KV HIGHVOLTAGE PRIMARY SECONDARY	X AN 1/30

Segment: **REF** Reference Identification (Number of Dials)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Service Point Addition: Required for each meter that has dials
 Meter Addition: Required for each meter that has dials
 Meter Exchange: Required for each meter that has dials
 All other transactions: Not Used

Number of Dials on the meter expressed as X.Y where X is the number of dials to the left of the decimal and Y is the number of dials to the right.

REF~IX~6.0 Meter has 6 digits to the left of the decimal and none to the right.
 REF~IX~5.1 Meter has 5 digits to the left of the decimal and one to the right.

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 IX Item Number	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Number of Dials	X AN 1/30

Segment: **REF** Reference Identification (Meter Constant)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Service Point Addition: Required for each meter
 Meter Addition: Required for each meter
 Meter Exchange: Required for each meter
 All other transactions: Not Used

The Meter Constant will be formatted as 6 digits to the left of the decimal, a decimal point and four digits to the right of the decimal. All 11 characters must be sent.

REF~4P~000001.0000 Meter Constant of 1
 REF~4P~000080.0000 Meter Constant of 80

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 4P Affiliation Number Meter Constant (Meter Multiplier) (Ending Reading - Beginning Reading) * Meter Constant = Consumption	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Constant	X AN 1/30

Segment: **REF** Reference Identification (Meter Role)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Service Point Addition: Required for each meter
 Meter Addition: Required for each meter
 Meter Exchange: Required for each meter
 All other transactions: Not Used
 REF~JH~A

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 JH Tag Meter Role	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A Additive - this consumption contributed to the summarized total (do nothing). I Ignore - this consumption did not contribute to the summarized total (do nothing). S Subtractive - this consumption needs to be subtracted from the summarized total.	X AN 1/30

Segment: **REF** Reference Identification (Special Meter Configuration)
Position: 130
Loop: NM1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes:

RES to Utility: Not Used
 Utility to RES:
 Service Point Addition: Required for each meter
 Meter Addition: Required for each meter
 Meter Exchange: Required for each meter
 All other transactions: Not Used

Please note that additional codes may be added as necessary.
 REF~KY~BMG

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 KY Site Specific Procedures, Terms, and Conditions Special Meter Configuration	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier AL Auxiliary Load (ComEd) BMG Behind the Meter Generation CM Check Meter (ComEd) CO Check Meter/Outflow (ComEd) GM Generator Meter (ComEd) GO Generated Out Meter (ComEd) GS General Service (ComEd) IC Inflow/Check Meter (ComEd) IF In With Flow Through (ComEd) IO In/Out Meter Flow Through (ComEd) IW In/Out Without Flow Through (ComEd) KQ KQ Only (ComEd) NM-BI Net Metering - Bidirectional Meter NM-GG Net Metering - Gross Generation Meter NM-GL Net Metering - Gross Load Meter OF Out with Flow Through (ComEd) OW Out without Flow Through (ComEd) PG Power Factor General Service (ComEd) PS Power Factor Space Heat (ComEd) SH Space Heating (ComEd) XY Rider VA Gen Meter (ComEd)	X AN 1/30

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

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required
SE~13~000000001

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
Must Use	SE02	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

Please see separate document "**814 Change Implementation Examples**" for samples of each of the 814 Change transactions.