Illinois

Implementation Guide For **E**lectronic **D**ata **I**nterchange

Summary of Changes

January 6, 2009
Version 1.0

- Initial Release.

January 6, 2011
Version 1.1

- **Change Control #016** – Updated POR Eligibility Group Codes.

June 28, 2023
Version 1.2

- **Change Control #054** – Updated the Purpose verbiage in the Implementation Notes section to make it known that this transaction may now also be used by the Utility to communicate supply charges to the RES for on-site net metered service points that are billed via SBO or Dual Billing.

Implementation Notes

Purpose

- This document is used to define the requirements of the "Rate Ready" Utility Consolidated Bill. Under this scenario, the Utility calculates the RES's portion of the bill using rates provided in advance by the RES. The Utility presents the consolidated bill to the customer.

  Please note that the EDI 810 Rate Ready transaction can also be used by the Utility to communicate supply charges to the RES when the RES has set up a default rate or has assigned a rate code to an SBO or Dual billed account that participates in on-site net metering.

Billing Options by Utility

- Ameren supports Rate Ready Utility Consolidated Billing, Bill Ready Utility Consolidated Billing, RES Consolidated Billing (Single Bill Option) and Dual Billing.

- ComEd supports Bill Ready Utility Consolidated Billing, RES Consolidated Billing (Single Bill Option) and Dual Billing.

Cross Reference between 867, 810, 820

- CPWG has established a Cross Reference Number to tie together the 867, 810 and 820 transactions for UCB/POR, where appropriate.
    - The 867 initiates the Cross Reference Number in the BPT02 field
    - The Cross Reference Number then appears in the 810 Invoice (Bill Ready and Rate Ready) in the BIG05.
    - The Cross Reference Number is finally provided in the 820 UCB Remittance Advice transaction in the REF*6O segment for UCB/POR.

Implementation of Service Point (Ameren)

- Ameren Mass Market
    - The Service Point Number will be sent in REF*LU.

- Ameren Non-Mass Market
    - The Service Point Number will be sent in REF*LU.

Cancel/Rebill

- In the event that the utility needs to cancel/rebill due to usage, the RES charges will automatically be canceled.

    - Utility sends 867 Cancel

    - Utility sends corresponding 810 Cancel

- The values will be identical in sign to the original bill. The differences include the BIG08, which will show the cancel code "01", and an additional segment to provide the Original Invoice Number (REF~OI).

- The cancel must always be sent before the rebill, but may occur on the same day within the same ISA.

- The rebill will always be coded as an original (BIG08 = "00") and will have no reference to the original or cancel 810s.

Purchase of Receivables

- At this time, the Utility Consolidated Billing and Purchase of Receivables are tied together. An account cannot participate in one program without also participating in the other. Therefore, no Balance segments have been included in this Implementation Guideline.

Budget Billing

- Not supported.

810 Invoice

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BIG	Beginning Segment for Invoice	M	1		
	050	REF	Reference Identification	O	12		
			LOOP ID - N1			200	
	070	N1	Name	O	1		
	130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1		
	160	PID	Product/Item Description	O	200		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - IT1			200000	
	010	IT1	Baseline Item Data (Invoice)	O	1		
	120	REF	Reference Identification	O	>1		
	150	DTM	Date/Time Reference	O	10		
			LOOP ID - SLN			1000	
	200	SLN	Subline Item Detail	O	1		
	230	SAC	Service, Promotion, Allowance, or Charge Information	O	25		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	TDS	Total Monetary Value Summary	M	1		
	070	CTT	Transaction Totals	O	1		n1
M	080	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

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~810~000000001		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**ST01**	**143**	**Transaction Set Identifier Code**	**M ID 3/3**
			Code uniquely identifying a Transaction Set	
			810 Invoice	
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:	**BIG** Beginning Segment for Invoice
	Position:	020
	Loop:	
	Level:	Heading
	Usage:	Mandatory
	Max Use:	1
	Purpose:	To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates
	Syntax Notes:	
	Semantic Notes:	**1** BIG01 is the invoice issue date.
		2 BIG03 is the date assigned by the purchaser to purchase order.
		3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.
	Comments:	**1** BIG07 is used only to further define the type of invoice when needed.
	Notes:	Required
		BIG~20090101~1234567890-20090101.001~~~2009010100000-867.00001~~ME~00

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**BIG01**	**373**	**Date**	**M DT 8/8**

Date expressed as CCYYMMDD

Invoice Date - the date that appears on the customer's invoice.

Must Use	**BIG02**	**76**	**Invoice Number**	**M AN 1/22**

Identifying number assigned by issuer

A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.This number will be sent in the RMR Loop REF*IK of the 820 and/or the OTI03 of the 824.

Invoice 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.

Must Use	**BIG05**	**328**	**Release Number**	**O AN 1/30**

Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction

The cross-reference number originally transmitted in the 867 in the BPT02 must be sent in the BIG05 of the 810 and in the RMR loop REF~6O of the 820.

For a cancelled invoice, the cross-reference number originally transmitted in the BPT02 of the cancelled usage transaction must be sent in the BIG05 of the 810.

Must Use	**BIG07**	**640**	**Transaction Type Code**	**O ID 2/2**

Code specifying the type of transaction

FE	Memorandum, Final Bill	
	Designates a final bill for the customer for the specified RES.	
ME	Memorandum	
	Regular Bill	

Must Use	**BIG08**	**353**	**Transaction Set Purpose Code**	**O ID 2/2**

Code identifying purpose of transaction set

00	Original
01	Cancellation

Segment:	**REF** Reference Identification (RES Account Number)			
Position:	050			
Loop:				
Level:	Heading			
Usage:	Optional			
Max Use:	12			
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 provided on the 814 Enrollment or 814 Change transactions.			
	REF~11~1234567890			

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	
			11 Account Number	
			RES Account Number	
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	
			RES Account Number	

	Segment:	**REF** Reference Identification (Utility Account Number)
	Position:	050
	Loop:	
	Level:	Heading
	Usage:	Optional
	Max Use:	12
	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~GROUPA

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		
			12 Billing Account		
			Utility Account Number		
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		
			Utility Account Number		
Must Use	REF03	352	**Description**	**X**	**AN 1/80**
			A free-form description to clarify the related data elements and their content		
			This code indicates the current class of customer in regards to the POR Eligibility groups as of the time the transaction is sent.		
			GROUPA POR Eligibility Group A		
			Ameren: Residential POR Eligible Accounts		
			GROUPB POR Eligibility Group B		
			Ameren: Commercial Mass Market POR Eligible Accounts		
			GROUPC POR Eligibility Group C		
			Ameren: Non-Mass Market POR Eligible Accounts		
			NONPOR Account Not Eligible for POR		

Segment:	**REF** Reference Identification (Service Point Identifier)		
Position:	050		
Loop:			
Level:	Heading		
Usage:	Optional		
Max Use:	12		
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		

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

REF~LU~00721660

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	
		LU	Location Number	
			Service Point Identifier	
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	
			Service Point Identifier	

	Segment:	**REF** Reference Identification (Original Invoice Number)
	Position:	050
	Loop:	
	Level:	Heading
	Usage:	Optional
	Max Use:	12
	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 on 810 Cancel (BIG08 = 01), otherwise Not Used
		REF~OI~654967897120090101

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	
			OI Original Invoice Number	
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	
			Original Invoice Number (BIG02) of the transaction being canceled.	

Segment:	**REF** Reference Identification (Bill Presenter)			
Position:	050			
Loop:				
Level:	Heading			
Usage:	Optional			
Max Use:	12			
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			
	REF~BLT~LDC			

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		
			BLT	Billing Type	
			Bill Presenter		
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		
			LDC	Utility Presents the Consolidated Bill to the Customer	

	Segment:	**REF** Reference Identification (Bill Calculator)
	Position:	050
	Loop:	
	Level:	Heading
	Usage:	Optional
	Max Use:	12
	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
		REF~PC~LDC

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	
			PC Production Code	
			Bill Calculator	
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	
			LDC Utility Calculates the RES Charges	

Segment:	**REF** Reference Identification (Payment Option)				
Position:	050				
Loop:					
Level:	Heading				
Usage:	Optional				
Max Use:	12				
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				
	REF~9V~Y				

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		
			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 is not part of the POR Program		
			Y Customer is part of the POR Program		

	Segment:	**N1** Name (Utility)
	Position:	070
	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

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N101	98	**Entity Identifier Code**	**M**	**ID 2/3**

Code identifying an organizational entity, a physical location, property or an individual

8S	Consumer Service Provider (CSP)
	Utility

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N102	93	**Name**	**X**	**AN 1/60**

Free-form name

Utility Name

	Ref. Des.	Data Element	Name	Attributes	
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

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N104	67	**Identification Code**	**X**	**AN 2/80**

Code identifying a party or other code

Utility D-U-N-S or D-U-N-S+4 Number

	Segment:	**N1** Name (Retail Electric Supplier)
	Position:	070
	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

	Ref. Des.	Data Element	Name		Attributes
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)

Segment: **N1** Name (Customer)
Position: 070
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

N1~8R~CUSTOMER NAME

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	**Entity Identifier Code**	**M ID 2/3**

Code identifying an organizational entity, a physical location, property or an individual

    8R   Consumer Service Provider (CSP) Customer

Customer Name

	Ref. Des.	Data Element	Name	Attributes
Must Use	N102	93	**Name**	**X AN 1/60**

Free-form name

Customer Name

Segment:	**ITD** Terms of Sale/Deferred Terms of Sale		
Position:	130		
Loop:			
Level:	Heading		
Usage:	Optional		
Max Use:	>1		
Purpose:	To specify terms of sale		
Syntax Notes:	**1**	If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.	
	2	If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.	
	3	If ITD09 is present, then at least one of ITD10 or ITD11 is required.	
Semantic Notes:	**1**	ITD15 is the percentage applied to a base amount used to determine a late payment charge.	
Comments:	**1**	If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.	
Notes:	Required		
	ITD~~~~~~20100125		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	ITD06	446	**Terms Net Due Date**	O DT 8/8
			Date when total invoice amount becomes due expressed in format CCYYMMDD	
			Payment Due Date for the Customer	

Segment:	**PID** Product/Item Description	
Position:	160	
Loop:		
Level:	Heading	
Usage:	Optional	
Max Use:	200	
Purpose:	To describe a product or process in coded or free-form format	
Syntax Notes:	1	If PID04 is present, then PID03 is required.
	2	At least one of PID04 or PID05 is required.
	3	If PID07 is present, then PID03 is required.
	4	If PID08 is present, then PID04 is required.
	5	If PID09 is present, then PID05 is required.
Semantic Notes:	1	Use PID03 to indicate the organization that publishes the code list being referred to.
	2	PID04 should be used for industry-specific product description codes.
	3	PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
	4	PID09 is used to identify the language being used in PID05.
Comments:	1	If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
	2	Use PID06 when necessary to refer to the product surface or layer being described in the segment.
	3	PID07 specifies the individual code list of the agency specified in PID03.

Notes: Required if RES included Messages on the Portal, otherwise, Not Used.

Ameren allows two 142-character bill messages to be included on the customer bill. Multiple PID segments will be used to send the bill messages.

PID06 will be used to distinguish between Bill Message 1 (PID06=R1) and Bill Message 2 (PID06=R2).

PID07 will be used to distinguish between the first 80 characters of either message and the remaining characters if necessary. The first 80 characters will be sent on line 1 (PID07=1) and the remainder on line 2 (PID07=2).

The example below shows two messages, R1 and R2. The second message exceeds 80 characters and therefore requires two PID segments (PID07 = 1 and 2 respectively).

  PID~F~~EU~~Thank you for your business!~R1~1
  PID~F~~EU~~Choosing clean electricity is one of the easiest things you can do to make a dif~R2~1
  PID~F~~EU~~ference for the environment.~R2~2

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	PID01	349	**Item Description Type**	M	ID 1/1
			Code indicating the format of a description		
			F Free-form		
Must Use	PID03	559	**Agency Qualifier Code**	X	ID 2/2
			Code identifying the agency assigning the code values		
			EU Electric Utilities		
Must Use	PID05	352	**Description**	X	AN 1/80
			A free-form description to clarify the related data elements and their content		
			Bill Message Text		
Must Use	PID06	752	**Surface/Layer/Position Code**	O	ID 2/2
			Code indicating the product surface, layer or position that is being described		
			R1 Relative Position 1		

			Bill Message 1		
	R2		Relative Position 2		
			Bill Message 2		
Must Use	**PID07**	**822**	**Source Subqualifier**	**O**	**AN 1/15**

A reference that indicates the table or text maintained by the Source Qualifier

This element will be used to indicate the order for the print sequence for each bill message.

| 1 | First Portion of the Bill Message |
| 2 | Remaining Portion of the Bill Message |

Segment:	**IT1** Baseline Item Data	
Position:	010	
Loop:	IT1 Optional	
Level:	Detail	
Usage:	Optional	
Max Use:	1	
Purpose:	To specify the basic and most frequently used line item data for the invoice and related transactions	
Syntax Notes:	1	If any of IT102 IT103 or IT104 is present, then all are required.
	2	If either IT106 or IT107 is present, then the other is required.
	3	If either IT108 or IT109 is present, then the other is required.
	4	If either IT110 or IT111 is present, then the other is required.
	5	If either IT112 or IT113 is present, then the other is required.
	6	If either IT114 or IT115 is present, then the other is required.
	7	If either IT116 or IT117 is present, then the other is required.
	8	If either IT118 or IT119 is present, then the other is required.
	9	If either IT120 or IT121 is present, then the other is required.
	10	If either IT122 or IT123 is present, then the other is required.
	11	If either IT124 or IT125 is present, then the other is required.
Semantic Notes:	1	IT101 is the purchase order line item identification.
Comments:	1	Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
	2	IT106 through IT125 provide for ten 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	
	IT1~1~~~~~SV~ELECTRIC~C3~RATE	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**IT101**	**350**	**Assigned Identification**	**O**	**AN 1/20**
			Alphanumeric characters assigned for differentiation within a transaction set		
			Sequential Line Item Counter		
Must Use	**IT106**	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
			SV Service Rendered		
Must Use	**IT107**	**234**	**Product/Service ID**	**X**	**AN 1/48**
			Identifying number for a product or service		
			ELECTRIC		
Must Use	**IT108**	**235**	**Product/Service ID Qualifier**	**X**	**ID 2/2**
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
			C3 Classification		
Must Use	**IT109**	**234**	**Product/Service ID**	**X**	**AN 1/48**
			Identifying number for a product or service		
			RATE Charges at a Utility Rate Class Level		

	Segment:	**REF** Reference Identification (RES Rate Code)
	Position:	120
	Loop:	IT1 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

REF~RB~ABC123
REF~RB~ABC123~GREEN POWER

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	
			RB Rate code number	
			RES Rate Code	
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	
			RES Rate Code	
	REF03	**352**	**Description**	**X AN 1/80**
			A free-form description to clarify the related data elements and their content	
			Rate Code Description	

	Segment:	**REF** Reference Identification (RES Product Name)
	Position:	120
	Loop:	IT1　　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:	

Ameren: Required if populated by the RES

On the Ameren customer bill, they have allowed a text line for the RES to include a Product Name above their charges. This name may be up to 32 characters and if not populated will be left blank on the customer's bill.

REF~PG~~GREEN PRODUCT

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	
			PG　　　　　　Product Group	
			RES Product Name	
Must Use	**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 (Service Period Start Date)

Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
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:	Required
	The full service period must match the dates in the PTD~SU Loops of the corresponding 867 Monthly Usage or 867 Monthly Interval Usage transaction.
	DTM~150~20091115

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	
			150　　　　　　　Service Period Start	
Must Use	DTM02	373	**Date**	**X DT 8/8**
			Date expressed as CCYYMMDD	
			Service Period Start Date	

	Segment:	**DTM** Date/Time Reference (Service Period End Date)
	Position:	150
	Loop:	IT1 Optional
	Level:	Detail
	Usage:	Optional
	Max Use:	10
	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:
Required

The full service period must match the dates in the PTD~SU Loops of the corresponding 867 Monthly Usage or 867 Monthly Interval Usage transaction.

DTM~151~20091215

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	
			151 Service Period End	
Must Use	DTM02	373	**Date**	**X** **DT 8/8**
			Date expressed as CCYYMMDD	
			Service Period End Date	

Segment:		**SLN** Subline Item Detail		

Segment: **SLN** Subline Item Detail
Position: 200
Loop: SLN   Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify product subline detail item data
Syntax Notes: **1** If either SLN04 or SLN05 is present, then the other is required.
2 If SLN07 is present, then SLN06 is required.
3 If SLN08 is present, then SLN06 is required.
4 If either SLN09 or SLN10 is present, then the other is required.
5 If either SLN11 or SLN12 is present, then the other is required.
6 If either SLN13 or SLN14 is present, then the other is required.
7 If either SLN15 or SLN16 is present, then the other is required.
8 If either SLN17 or SLN18 is present, then the other is required.
9 If either SLN19 or SLN20 is present, then the other is required.
10 If either SLN21 or SLN22 is present, then the other is required.
11 If either SLN23 or SLN24 is present, then the other is required.
12 If either SLN25 or SLN26 is present, then the other is required.
13 If either SLN27 or SLN28 is present, then the other is required.
Semantic Notes: **1** SLN01 is the identifying number for the subline item.
2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.
Comments: **1** See the Data Element Dictionary for a complete list of IDs.
2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3 SLN09 through SLN28 provide for ten 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 - Each SLN loop will only contain one SAC. Multiple charges/allowances require multiple SLN loops.
SLN~1~~A

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**SLN01**	**350**	**Assigned Identification**	**M**	**AN 1/20**
			Alphanumeric characters assigned for differentiation within a transaction set		
			Sequential Line Item Counter		
Must Use	**SLN03**	**662**	**Relationship Code**	**M**	**ID 1/1**
			Code indicating the relationship between entities		
			A Add		

Segment:	**SAC** Service, Promotion, Allowance, or Charge Information		
Position:	230		
Loop:	SLN Optional		
Level:	Detail		
Usage:	Optional		
Max Use:	25		
Purpose:	To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge		
Syntax Notes:	1	At least one of SAC02 or SAC03 is required.	
	2	If either SAC03 or SAC04 is present, then the other is required.	
	3	If either SAC06 or SAC07 is present, then the other is required.	
	4	If either SAC09 or SAC10 is present, then the other is required.	
	5	If SAC11 is present, then SAC10 is required.	
	6	If SAC13 is present, then at least one of SAC02 or SAC04 is required.	
	7	If SAC14 is present, then SAC13 is required.	
	8	If SAC16 is present, then SAC15 is required.	
Semantic Notes:	1	If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.	
	2	SAC05 is the total amount for the service, promotion, allowance, or charge. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.	
	3	SAC08 is the allowance or charge rate per unit.	
	4	SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.	
	5	SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.	
	6	SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.	
	7	SAC16 is used to identify the language being used in SAC15.	
Comments:	1	SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.	
	2	In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.	
Notes:	Required - Invoice line item charge or allowance. SAC~C~~EU~ENC001~10000~~~.1~KH~1000~~~~~ENERGY CHARGE 1000 KWH .10/KWH		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SAC01	248	**Allowance or Charge Indicator**	**M ID 1/1**
			Code which indicates an allowance or charge for the service specified	
			C Charge	
Must Use	SAC03	559	**Agency Qualifier Code**	**X ID 2/2**
			Code identifying the agency assigning the code values	
			EU Electric Utilities	
Must Use	SAC04	1301	**Agency Service, Promotion, Allowance, or Charge Code**	**X AN 1/10**
			Agency maintained code identifying the service, promotion, allowance, or charge	
			ADJ001 Adjustment	
			BAS001 Basic Customer Charge	
			DMD001 Demand Charge	
			DMD006 Off Peak Demand Charge	
			DMD007 On Peak Demand Charge	

			ENC001	Energy Charge		
			ENC003	Off-Peak Energy Charge		
			ENC039	On Peak Energy Charge		

Must Use   **SAC05**   **610**   **Amount**   **O   N2 1/15**

Monetary amount

This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.

Must Use   **SAC08**   **118**   **Rate**   **O   R 1/9**

Rate expressed in the standard monetary denomination for the currency specified

This field must be signed if it is negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.

Must Use   **SAC09**   **355**   **Unit or Basis for Measurement Code**   **X   ID 2/2**

Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken

	EA	Each
	K1	Kilowatt Demand
	KH	Kilowatt Hour

Must Use   **SAC10**   **380**   **Quantity**   **X   R 1/15**

Numeric value of quantity

This field may not be negative. The SAC08 multiplied by the SAC10 must always equal the SAC05.

Must Use   **SAC15**   **352**   **Description**   **X   AN 1/80**

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

	Segment:	**TDS** Total Monetary Value Summary
	Position:	010
	Loop:	
	Level:	Summary
	Usage:	Mandatory
	Max Use:	1
	Purpose:	To specify the total invoice discounts and amounts
	Syntax Notes:	
	Semantic Notes:	1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
		2 TDS02 indicates the amount upon which the terms discount amount is calculated.
		3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
		4 TDS04 indicates the total amount of terms discount.
	Comments:	1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.
	Notes:	Required
		TDS~10000

Data Element Summary

	Ref. Des.	**Data Element**	**Name**	**Attributes**
Must Use	**TDS01**	**610**	**Amount**	**M N2 1/15**
			Monetary amount	
			The total amount due for this invoice which must equal the algebraic sum of the amounts in the SAC05 segments. This field must be signed if it is negative.	

			Segment:	**CTT** Transaction Totals

Segment: **CTT** Transaction Totals
Position: 070
Loop:
Level: Summary
Usage: Optional
Max Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set
Syntax Notes: 1 If either CTT03 or CTT04 is present, then the other is required.
2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.
Notes: Required

CTT~1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	CTT01	354	**Number of Line Items**	M N0 1/6
			Total number of line items in the transaction set	
			The number of IT1 segments.	

Segment:	**SE** **Transaction Set Trailer**	
Position:	080	
Loop:		
Level:	Summary	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)	
Syntax Notes:		
Semantic Notes:		
Comments:	**1** SE is the last segment of each transaction set.	
Notes:	Required	
	SE~25~000000001	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SE01	96	**Number of Included Segments**	**M N0 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	

Example

```
ST*810*0001
BIG*20080411*045604200520080411***867-00001.20080411**ME*00
REF*11*0456042005
REF*12*21803308016592*GROUPX
REF*LU*00983019
REF*BLT*LDC
REF*PC*LDC
REF*9V*Y
N1*8S*UTILITY*1*006912345
N1*SJ*SUPPLIER*9*007909111IL00
N1*8R*CUSTOMER NAME
ITD******20080501
PID*F**EU**Thank you for your business!*R1*1
PID*F**EU**Choosing clean electricity is one of the easiest things you can do to make a dif*R2*1
PID*F**EU**ference for the environment.*R2*2
IT1*1*****SV*ELECTRIC*C3*RATE
  REF*RB*ABC123
  REF*PG**GREEN PRODUCT
  DTM*150*20080310
  DTM*151*20080409
  SLN*1**A
    SAC*C**EU*ADJ001*-1000***-10*EA*1*****ADJUSTMENT FIRST MONTH CREDIT
  SLN*2**A
    SAC*C**EU*BAS001*595***5.95*EA*1*****BASIC CUSTOMER CHARGE
  SLN*3**A
    SAC*C**EU*DMD001*556***.0555*K1*100.1*****DEMAND CHARGE
  SLN*4**A
    SAC*C**EU*ENC001*49320***.0685*KH*7200*****ENERGY CHARGE
TDS*49471
CTT*1
SE*31*0001
```