Illinois

Implementation Guide For Electronic Data Interchange

Summary of Changes

January 6, 2009	• Initial Release.
October 24, 2009 Version 1.1	• **Change Control #004** – Corrected REF*CO to indicate that it is only required if value is other than 1.
	• **Change Control #005** – Corrected value CI in BPT04 to C1.
	• **Change Control #015** – Fixed Meter Multiplier to only be required when other than 1. Also, fixed QTY graybox at position 110 which referred to QTY04 (we do not use QTY04).
November 5, 2009 Version 1.2	• **Change Control #011** – Added Meter Role (REF*JH) and Measurement (MEA) segments to allow for adjusted usage in the PTD*BC Unmetered Services loop.
January 6, 2011 Version 1.3	• **Change Control #016** – Updated POR Eligibility Group Codes.
	• **Change Control #018** – Removed MEA01 from PTD*PM loop and corrected examples on segment. Removed old examples from the end of the document and added production examples from Ameren and test examples from ComEd.
	• **Change Control #021** – Changed POR Eligibility Group (REF03 of REF*12) and Payment Option (REF*9V) to be optional on Cancel.
	• **Change Control #022** – Added REF*SPL for Ameren's Rate Zone.
	• Corrected X12 values under "Attributes" column and headings of each page.
April 18, 2012 Version 1.4	• **Change Control #038** – Added BPT07 code "F" (Final) indicator.
May 31, 2013 Version 2.0	• **Change Control #040** – Added requirements for Ameren Gas
October 14, 2013 Version 2.1	• **Change Control #041** – Added examples for Ameren Gas and updated electric examples
October 15, 2016 Version 2.2	• **Change Control #047** – Added REF03 to the REF*AM – Adjustment Reason for Ameren to communicate the percentage of accuracy for fast/slow meter usage adjustments to retail gas suppliers.
November 16, 2018 Version 2.3	• **Change Control #051** – Added Net Metering Anniversary Month, Community Solar Participant Indicator (REF*AN), Total Off-site Generation QTY/MEA, Total On-site Generation QTY/MEA, Starting Bank QTY/MEA and new REF*KY code "VO" for Community Solar. Also added a description of Community Solar to the Implementation Notes.
September 28, 2023 Version 2.4	• **Change Control #055** – For ComEd, remove the code "VO" from the REF*KY segment and remove any information related to ComEd sending a pseudo meter for Community Solar. ComEd will no longer send the pseudo meter as there is no impact to supplier billing.
September 23, 2025 Version 2.5	• **Change Control #058** – Community Solar and Net Metering Changes including:
	o Corrected ANSI X12 fields such as minimum/maximum and use.
	o Added Net Meter Classification (REF*NM).
	o Changed Net Meter Anniversary Month to be applicable to ComEd as well as Ameren. Also added use of code 00.

- o Changed Community Solar Participant Indicator to Optional.
- o Changed QTY for Total Off-Site Generation to Optional with a note that this will stop being sent.
- o Changed Starting Bank QTY and MEA to be required for ComEd (previously only required for Ameren) when an Account/Service Point has net metering where kWh is banked. Also changed QTY02 and MEA03 to remove reference to off-site generation.
- o Added Ending Bank QTY and MEA.
- o Removed Special Meter Configuration Code "VO" which was used to identify ComEd's pseudo meters for Community Solar.
- o Updated examples based on production data.

Implementation Notes

PTD Loops Definition

- The PTD~SU loop is used to show the total usage for the account/service point. There will only be one PTD~SU loop per transaction and is always required.

- The PTD~PL loop is used to show usage for each non-interval meter. There will only be one PL loop per meter and have multiple QTY/MEA loops for the different units of measure or measurement significance codes.

- The PTD~PM loop is used to show usage for each interval meter.

- The PTD~BC loop is used to show unmetered or adjusted usage.
    - For Ameren: Will be used if unmetered services are on the account. Also, in the rare cases when an adjustment to the usage is requested by the customer and a cancel and rebill will not handle the adjustment amount. The adjustment could be for metered services. Ameren may have more than one BC loop per transaction as they will keep all adjustments in separate BC loops. All adjustments would be current period adjustments only.
    - For ComEd: Will be used if unmetered services are on the account. ComEd will never have more than one BC loop per transaction.

- Neither ComEd nor Ameren will ever send time of use meters and non-time of use meters in the same transactions. Therefore, the total of the on peak and off peak kWh readings will equal the total for kWh on the account.

Cancellations

- The MEA is an optional segment on a cancellation

- Cancel 867's will be by metering point (same as original 867's). Rebills may be for multiple periods.

- The "from" and "to" dates on the cancel must match exactly with the original usage.

- On a cancellation, the signs are NOT reversed. Cancels should be interpreted as negative consumption.

- The consumption sent in the cancel MUST match the consumption sent in the original transaction.

Rebills

- In order to restate usage for a period, the original usage must be canceled and then the new usage can be sent.

- If a cancellation is sent, it does not necessarily mean a restated usage will be sent (usage sent in error).

Definition of Mass Market Customers

- Ameren Mass Market
    - Electric - Includes any account containing one or more of only the following types of service points: DS-1 (residential), DS-2 (small commercial < 150 kW) or DS-5 (lighting).
    - Gas – Includes any account containing one or more of only the following types of service points: GDS-1 (residential) and GDS-2 (small general gas delivery - provided that GDS-2 service point(s) are not on the Rider T gas transportation option).

- ComEd Mass Market – Includes all residential and commercial customers under 100 kW.

Definition of Service Point	• 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 Retail Electric Supplier/Gas Supplier (RES/GS) is required to take all service points on the account that is being enrolled. For Non-Mass Market accounts, the RES/GS may choose which Service Points to serve. It is important to follow the 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.
One Commodity per Transaction	• Each submitted transaction may be valid for only one commodity (i.e., electric or gas).

867 Product Transfer and Resale Report

<div align="right">

Functional Group ID=PT

</div>

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Transfer and Resale Report Transaction Set (867) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to: (1) report information about product that has been transferred from one location to another; (2) report sales of product from one or more locations to an end customer; or (3) report sales of a product from one or more locations to an end customer, and demand beyond actual sales (lost orders). Report may be issued by either buyer or seller.

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	BPT	Beginning Segment for Product Transfer and Resale	M	1		
			LOOP ID - N1			5	
	080	N1	Name	O	1		
	120	REF	Reference Identification	O	12		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - PTD			>1	
M	010	PTD	Product Transfer and Resale Detail	M	1		
	020	DTM	Date/Time Reference	O	10		
	030	REF	Reference Identification	O	20		
			LOOP ID - QTY			>1	
	110	QTY	Quantity	O	1		
	160	MEA	Measurements	O	40		
	210	DTM	Date/Time Reference	O	10		

Summary:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	030	SE	Transaction Set Trailer	M	1		

Segment:	**ST** Transaction Set Header	
Position:	010	
Loop:		
Level:	Heading	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the start of a transaction set and to assign a control number	
Syntax Notes:		
Semantic Notes:	1	The transaction set identifier (ST01) 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~867~00000001	

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	
			867 Product Transfer and Resale Report	
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:		**BPT**	**Beginning Segment for Product Transfer and Resale**		
Position:		020			
Loop:					
Level:		Heading			
Usage:		Mandatory			
Max Use:		1			
Purpose:		To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data			
Syntax Notes:		**1**	If either BPT05 or BPT06 is present, then the other is required.		
Semantic Notes:		**1**	BPT02 identifies the transfer/resale number.		
		2	BPT03 identifies the transfer/resale date.		
		3	BPT08 identifies the transfer/resale time.		
		4	BPT09 is used when it is necessary to reference a Previous Report Number.		
Comments:					

Notes:

Required

BPT~00~20081012123456789~20081201~DD
BPT~00~20120418123456789~20120418~DD~~~F

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**BPT01**	**353**	**Transaction Set Purpose Code**	**M**	**ID 2/2**
			Code identifying purpose of transaction set		
			00	Original	
				Conveys original readings for the account being reported.	
			01	Cancellation	
				Indicates that the readings previously reported for the account are to be ignored.	
Must Use	**BPT02**	**127**	**Reference Identification**	**O**	**AN 1/30**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			A unique transaction identification number assigned by the originator of this transaction. This number should be unique over time.		
			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.		
Must Use	**BPT03**	**373**	**Date**	**M**	**DT 8/8**
			Date expressed as CCYYMMDD		
			Transaction Creation Date. This is the date that the transaction was created by the sender's application system.		
Must Use	**BPT04**	**755**	**Report Type Code**	**O**	**ID 2/2**
			Code indicating the title or contents of a document, report or supporting item		
			C1	Cost Data Summary	
				Electric: Indicates transaction is an Interval usage transaction with only interval meters on the account. Gas: Not Used	
			DD	Distributor Inventory Report	
				Indicates transaction is a non-interval usage transaction.	
			DR	Datalog Report	
				Electric: Mixed Values - Sent on interval transaction if the account has both interval and non-interval meters. Gas: Not Used	
Dep	**BPT07**	**306**	**Action Code**	**O**	**ID 1/2**
			Code indicating type of action		
			Ameren: Not Used		

ComEd: When an account finals, the last 867 usage transaction sent to the RES will include an F in the BPT07 element. If the account is dropped due to another RES enrollment or dropped to the utility, an F indicator is not included in the 867 transaction.

| | | F | Final |

Dep	**BPT09**	**127**	**Reference Identification**	**O**	**AN 1/30**

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

When BPT01 = 01 this element should contain the transaction identification number sent in the BPT02 in the transaction that is being cancelled.

Segment:	**DTM** Date/Time Reference (Document Due Date)
Position:	050
Loop:	
Level:	Heading
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:	Required for Bill Ready Consolidated Billing where the Utility sends an 867 to the RES/GS, who calculates their own portion of the bill and sends the 810 to the Utility. Must be expressed in Central Time. Not provided on cancel transaction. DTM~649~20091225~1500

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

649   Document Due

The date and time that the RES/GS must provide the 810 transaction back to the Utility.

If a file is received by the Utility after the date and time, and the Utility cannot process it, they must notify the RES/GS via 824 transaction.

	Ref. Des.	Data Element	Name		Attributes
Must Use	**DTM02**	**373**	**Date**		**X DT 8/8**

Date expressed as CCYYMMDD

	Ref. Des.	Data Element	Name		Attributes
Must Use	**DTM03**	**337**	**Time**		**X TM 4/8**

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)
HHMM format

Segment:	**N1** Name (Utility)	
Position:	080	
Loop:	N1 Optional (Must Use)	
Level:	Heading	
Usage:	Optional (Must Use)	
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~1~123456789	

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	
Must Use	**N102**	**93**	**Name**	**X AN 1/60**
			Free-form name	
			Utility 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	
			Utility D-U-N-S or D-U-N-S+4 Number	

Segment:	**N1**	Name (Retail Electric Supplier/Gas Supplier)	
Position:	080		
Loop:	N1	Optional (Must Use)	
Level:	Heading		
Usage:	Optional (Must Use)		
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/GS COMPANY~1~987654321

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) or Gas Supplier (GS)

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

Free-form name

RES/GS 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

RES/GS D-U-N-S or D-U-N-S+4 Number

Segment:	**N1** Name (Customer)
Position:	080
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**	**X ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual	
			8R Consumer Service Provider (CSP) Customer	
			Customer Name	
Must Use	**N102**	**93**	**Name**	**X AN 1/60**
			Free-form name	
			Customer Name	

Segment:	**REF** Reference Identification (RES/GS Account Number)
Position:	120
Loop:	N1　　Optional
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 transaction.
	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		
			Retail Electric Supplier (RES) or Gas Supplier (GS) 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/GS Account Number		

Segment:	**REF** Reference Identification (Utility Account Number)
Position:	120
Loop:	N1 Optional
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
REF~12~0000445648

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		
Dep	REF03	352	**Description**	X	AN 1/80
			A free-form description to clarify the related data elements and their content		

Electric Original Bill - Required
Electric Cancel Bill - Optional
Gas: Not Used
This code indicates the current class of customer in regard to the POR Eligibility groups as of the time the transaction is sent.

	GROUPA	POR Eligibility Group A
		Ameren: Residential POR Eligible Accounts ComEd: Residential
	GROUPB	POR Eligibility Group B
		Ameren: Commercial Mass Market POR Eligible Accounts ComEd: Commercial Mass Market POR Eligible Accounts (watt-hour/small)
	GROUPC	POR Eligibility Group C
		Ameren: Non-Mass Market POR Eligible Accounts ComEd: Non-Mass Market POR Eligible Accounts (medium)
	GROUPD	POR Eligibility Group D
		Ameren: Not Used ComEd: Lighting
	NONPOR	Account Not Eligible for POR

Segment:	**REF** Reference Identification (Service Point Identifier)	
Position:	120	
Loop:	N1 Optional	
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:

Ameren Mass Market: Required - Monthly Usage sent by Service Point
Ameren Non-Mass Market: Required - Monthly Usage sent by Service Point
ComEd: Not Used

Ameren currently uses an 8-digit Service Point Identifier. All 8 digits, including leading zeros must be provided.
REF~LU~00034180

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 (Bill Presenter)		
Position:	120		
Loop:	N1 Optional		
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	
			DUAL The Utility and RES/GS both Present Bills to the Customer	
			ESP RES/GS Presents the Consolidated Bill to the Customer	
			Used for Illinois "SBO" (Single Bill Option) Only	
			LDC Utility Presents the Consolidated Bill to the Customer	
			Used for both Rate Ready and Bill Ready Utility Consolidated Billing	

Segment:	**REF** Reference Identification (Bill Calculator)			
Position:	120			
Loop:	N1 Optional			
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~DUAL			

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	
			Identifies the party that is to calculate their charges for the bill.	
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	
			DUAL Each party calculates its own charges	
			Used for Dual Billing, Illinois "SBO" (Single Bill Option) and Bill Ready Utility Consolidated Billing	
			LDC The Utility calculates the RES/GS charges	
			Used for Rate Ready Utility Consolidated Billing	

Segment:	**REF** Reference Identification (Payment Option)
Position:	120
Loop:	N1 Optional
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:	Electric Original Bill: Required
	Electric Cancel Bill: Optional
	Gas: Not Used
	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.

	Ref. Des.	Data Element	Name	Attributes
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 (Rate Zone)				
Position:	120				
Loop:	N1 Optional				
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:	Ameren - Required on Original Bill, Optional on Cancel				
	ComEd - Not Used				
	REF~SPL~RATE ZONE I				
	REF~SPL~RATE ZONE II				
	REF~SPL~RATE ZONE III				

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		
			SPL Standard Point Location Code (SPLC)		
			Rate Zone		
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		
			Rate Zone		

Segment:		**REF** Reference Identification (Net Meter Classification)		
Position:	120			
Loop:	N1 Optional			
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 Original if customer has net metering			
	Optional on Cancel			
	REF~NM~KWHN (Ameren Example)			
	REF~NM~NM3 (ComEd Example)			

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	
			NM Discounter Registration Number	
			Net Meter Classification	
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	
			KWHN kWh Credit - No Anniversary (Ameren)	
			KWHY kWh Credit with Anniversary Month (Ameren)	
			MON Monetary Credit (Ameren)	
			NM3 RDS Watthour, Demand, Lighting, and Residential with non-hourly RES Supply (ComEd)	
			kWh Credit with Anniversary Month	
			NM4 RDS Watthour, Demand, Lighting, and Residential with hourly RES Supply (ComEd)	
			Monetary Credit	
			NM6 Competitively declared Commercial and Lighting with hourly RES Supply (ComEd)	
			Monetary Credit	
			NM9 RDS Watthour, Demand, Lighting, and Residential with non-hourly RES Supply with DG Rebate (ComEd)	
			kWh Credit - No Anniversary Month	
			NM10 RDS Watthour, Demand, Lighting and Residential with DG Rebate (ComEd)	
			Monetary Credit	
			NM12 Competitively declared Commercial and Lighting with hourly RES Supply with DG rebate (ComEd)	
			Monetary Credit	
			NM14 RDS Watthour, Demand, Lighting, and Residential with non-hourly RES Supply with DG rebate (ComEd)	
			Monetary Credit	

Segment:	**PTD** Product Transfer and Resale Detail (Summary)	
Position:	010	
Loop:	PTD Mandatory	
Level:	Detail	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data	
Syntax Notes:	1 If either PTD02 or PTD03 is present, then the other is required.	
	2 If either PTD04 or PTD05 is present, then the other is required.	
Semantic Notes:		
Comments:		
Notes:	Required	

Required

There will only be 1 PTD~SU loop per transaction

PTD~SU

PTD~SU~~~OZ~EL

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**PTD01**	**521**	**Product Transfer Type Code**		**M ID 2/2**

Code identifying the type of product transfer

SU	Summary

This will be the total of all PM PL and BC Loops.
For Ameren, it will be by service point.
For ComEd, it will be by account/rate class.

	PTD04	**128**	**Reference Identification Qualifier**		**X ID 2/3**

Code qualifying the Reference Identification

Ameren: Required
ComEd: Not Used

OZ	Product Number

Commodity

	PTD05	**127**	**Reference Identification**		**X AN 1/30**

Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Ameren: Required
ComEd: Not Used

EL	Electric
GAS	Gas

Segment:	**DTM** Date/Time Reference (Service Period Start)
Position:	020
Loop:	PTD Mandatory
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
	This date reflects the beginning of the date range for this billing period.
	DTM~150~20081201

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	

Segment:	**DTM** Date/Time Reference (Service Period End)
Position:	020
Loop:	PTD Mandatory
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
	This date reflects the ending of the date range for this billing period.
	DTM~151~20081230

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		

Segment:	**DTM** Date/Time Reference (Net Metering Anniversary Month)		
Position:	020		
Loop:	PTD Mandatory		
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 for premise that has On-Site Generation to notify the supplier which month, April or October, that the customer's bank will be cleared. Beginning with the first bill cycle after the Anniversary Month, the Beginning Bank (QTY*QH) will be set to zero. For those customers that have a kWh rollover that does not expire, 00 will be sent. This segment will not be used when the customer has a monetary credit.		
	DTM~978~~~~MM~00		
	DTM~978~~~~MM~04		
	DTM~978~~~~MM~10		

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	
			978 Plan Anniversary	
			Net Metering Anniversary Month	
Must Use	DTM05	1250	**Date Time Period Format Qualifier**	X ID 2/3
			Code indicating the date format, time format, or date and time format	
			MM Month of Year in Numeric Format	
Must Use	DTM06	1251	**Date Time Period**	X AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times	
			00 No Anniversary Month	
			04 April	
			10 October	

Segment:	**REF** Reference Identification (Utility Rate Class)		
Position:	030		
Loop:	PTD	Mandatory	
Level:	Detail		
Usage:	Optional		
Max Use:	20		
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~NH~GS1~Large-GS		

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	
			NH Rate Card Number	
			Utility Rate Class	
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 Rate Class	
	REF03	352	**Description**	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Text Description of Rate Class	

Segment:		**REF** Reference Identification (Load Profile)			
Position:		030			
Loop:		PTD	Mandatory		
Level:		Detail			
Usage:		Optional			
Max Use:		20			
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~LO~GS			

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		
			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 (Supply Group)		
Position:	030		
Loop:	PTD	Mandatory	
Level:	Detail		
Usage:	Optional		
Max Use:	20		
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:

Note: Supply group will be shown in REF03 due to the length of the supply group names.

ComEd: Required

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

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**REF01**	**128**	**Reference Identification Qualifier**	**M**	**ID 2/3**
			Code qualifying the Reference Identification		
			PTC Patent Type		
			Supply Group		
Must Use	**REF03**	**352**	**Description**	**X**	**AN 1/80**
			A free-form description to clarify the related data elements and their content		
			Supply Group		

	Segment:	**REF** Reference Identification (Community Solar Participant Indicator)
	Position:	030
	Loop:	PTD Mandatory
	Level:	Detail
	Usage:	Optional
	Max Use:	20
	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:	Electric: Optional if customer is a participant in Community Solar
		Gas: Not Used
		REF~AN~N

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	
			AN Associated Purchase Orders	
			Community Solar Participant Indicator	
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 No	
			This customer does not participate in Community Solar for this Service Point	
			Y Yes	
			This customer participates in Community Solar for this Service Point	

Segment:	**QTY**	**Quantity (Total Consumption)**		

Position:	110
Loop:	QTY Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	1 At least one of QTY02 or QTY04 is required.
	2 Only one of QTY02 or QTY04 may be present.
Semantic Notes:	1 QTY04 is used when the quantity is non-numeric.
Comments:	
Notes:	Required

Required
There will be one QTY loop for each type of consumption for the meter (i.e., kW, kWh, kVARH, Therms). If a meter measures total usage, as well as on-peak and off-peak, all three values would be contained in same QTY loop.
QTY~QD~24000~KH
  MEA~AA~PRQ~24000~KH~8702~8777~51
  MEA~AA~PRQ~10240~KH~3493~3525~42
  MEA~AA~PRQ~53.76~K1~~~41
  MEA~AA~PRQ~56.64~K1~~~42

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M ID 2/2

Code specifying the type of quantity

KA	Estimated	
	Used when Quantity in QTY02 is Estimated	
QD	Quantity Delivered	
	Used when Quantity in QTY02 is Actual Reading	

Must Use	QTY02	380	**Quantity**	X R 1/15

Numeric value of quantity

Represents quantity of consumption delivered for service period

Must Use	QTY03	C001	**Composite Unit of Measure**	O

To identify a composite unit of measure (See Figures Appendix for examples of use)

Must Use	C00101	355	**Unit or Basis for Measurement Code**	M ID 2/2

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

K1	Kilowatt Demand	
	KW	
K3	Kilovolt Amperes Reactive Hour	
	KVARH	
KH	Kilowatt Hour	
	KWH	
TD	Therms	

Segment:	**MEA** Measurements (Readings)
Position:	160
Loop:	QTY Optional
Level:	Detail
Usage:	Optional
Max Use:	40
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

Syntax Notes:
1. At least one of MEA03 MEA05 MEA06 or MEA08 is required.
2. If MEA05 is present, then MEA04 is required.
3. If MEA06 is present, then MEA04 is required.
4. If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
5. Only one of MEA08 or MEA03 may be present.

Semantic Notes:
1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:
1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:
Required

MEA~AA~PRQ~87~KH~~~51
MEA~AA~PRQ~3.5~K1~~~51

Data Element Summary

Ref. Des.	Data Element	Name		Attributes
Must Use **MEA01**	737	**Measurement Reference ID Code**		O ID 2/2
		Code identifying the broad category to which a measurement applies		
		AA	Meter reading-beginning actual/ending actual	
		AE	Meter reading-beginning actual/ending estimated	
		AF	Actual Total	
		EA	Meter reading-beginning estimated/ending actual	
		EE	Meter reading-beginning estimated/ending estimated	
Must Use **MEA02**	738	**Measurement Qualifier**		O ID 1/3
		Code identifying a specific product or process characteristic to which a measurement applies		
		PRQ	Product Reportable Quantity	
Must Use **MEA03**	739	**Measurement Value**		X R 1/20
		The value of the measurement		
MEA04	C001	**Composite Unit of Measure**		X
		To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use **C00101**	355	**Unit or Basis for Measurement Code**		M ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
		K1	Kilowatt Demand	
			KW	
		K3	Kilovolt Amperes Reactive Hour	
			KVARH	
		KH	Kilowatt Hour	
			KWH	
		TD	Therms	
Must Use **MEA07**	935	**Measurement Significance Code**		O ID 2/2
		Code used to benchmark, qualify or further define a measurement value		
		41	Off Peak	
		42	On Peak	
		51	Total	

Segment:	**QTY** Quantity (Total On-Site Generation)
Position:	110
Loop:	QTY Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	1 At least one of QTY02 or QTY04 is required.
	2 Only one of QTY02 or QTY04 may be present.
Semantic Notes:	1 QTY04 is used when the quantity is non-numeric.
Comments:	
Notes:	Ameren: Required when service point has on-site generation.
	ComEd: Not Used
	QTY*87*300*KH
	MEA*AF*PRQ*300*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M	ID 2/2
			Code specifying the type of quantity		
			87 Quantity Received		
			Total On-Site Generation (Actual)		
			9H Estimated Duration		
			Total On-Site Generation (Estimated)		
Must Use	QTY02	380	**Quantity**	M	R 1/15
			Numeric value of quantity		
			Represents the total on-site measured generation.		
Must Use	QTY03	C001	**Composite Unit of Measure**	M	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Dep	C00101	355	**Unit or Basis for Measurement Code**	O	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH Kilowatt Hour		

Segment:	**MEA** Measurements
Position:	160
Loop:	QTY Optional
Level:	Detail
Usage:	Optional (Dependent)
Max Use:	40
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes:	1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
	2 If MEA05 is present, then MEA04 is required.
	3 If MEA06 is present, then MEA04 is required.
	4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
	5 Only one of MEA08 or MEA03 may be present.
Semantic Notes:	1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments:	1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.
Notes:	Ameren: Required when service point has on-site generation.
	ComEd: Not Used
	QTY*87*300*KH
	MEA*AF*PRQ*300*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	MEA01	737	**Measurement Reference ID Code**	M	ID 2/2
			Code identifying the broad category to which a measurement applies		
			AF Actual Total		
Must Use	MEA02	738	**Measurement Qualifier**	M	ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies		
			PRQ Product Reportable Quantity		
Must Use	MEA03	739	**Measurement Value**	M	R 1/20
			The value of the measurement		
			Represents quantity of on-site generation received for service period.		
	MEA04	C001	**Composite Unit of Measure**	X	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	C00101	355	**Unit or Basis for Measurement Code**	M	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH Kilowatt Hour		
Must Use	MEA07	935	**Measurement Significance Code**	M	ID 2/2
			Code used to benchmark, qualify or further define a measurement value		
			51 Total		

Segment:	**QTY** Quantity (Total Off-Site Generation)		
Position:	110		
Loop:	QTY	Optional	
Level:	Detail		
Usage:	Optional		
Max Use:	1		
Purpose:	To specify quantity information		
Syntax Notes:	1	At least one of QTY02 or QTY04 is required.	
	2	Only one of QTY02 or QTY04 may be present.	
Semantic Notes:	1	QTY04 is used when the quantity is non-numeric.	
Comments:			

Notes: Ameren: Optional when customer has off-site generation such as Community Solar. This information will stop being sent as the RES is no longer impacted by IL Community Solar.
ComEd: Not Used
QTY*77*100*KH
  MEA*AF*PRQ*100*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**QTY01**	**673**	**Quantity Qualifier**	**M**	**ID 2/2**
			Code specifying the type of quantity		
			77	Stock Transfers In	
				Off-Site Generation (Community Solar)	
Must Use	**QTY02**	**380**	**Quantity**	**M**	**R 1/15**
			Numeric value of quantity		
			Represents the total off-site generation (e.g., Community Solar).		
Must Use	**QTY03**	**C001**	**Composite Unit of Measure**	**M**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	**C00101**	**355**	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH	Kilowatt Hour	

Segment:	**MEA** Measurements			
Position:	160			
Loop:	QTY	Optional		
Level:	Detail			
Usage:	Optional (Dependent)			
Max Use:	40			
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)			

Syntax Notes:
1. At least one of MEA03 MEA05 MEA06 or MEA08 is required.
2. If MEA05 is present, then MEA04 is required.
3. If MEA06 is present, then MEA04 is required.
4. If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
5. Only one of MEA08 or MEA03 may be present.

Semantic Notes:
1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:
1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:
Ameren: Optional when customer has off-site generation such as Community Solar.
ComEd: Not Used
QTY*77*100*KH
  MEA*AF*PRQ*100*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	MEA01	737	**Measurement Reference ID Code**	**M**	**ID 2/2**
			Code identifying the broad category to which a measurement applies		
			AF Actual Total		
Must Use	MEA02	738	**Measurement Qualifier**	**M**	**ID 1/3**
			Code identifying a specific product or process characteristic to which a measurement applies		
			PRQ Product Reportable Quantity		
Must Use	MEA03	739	**Measurement Value**	**M**	**R 1/20**
			The value of the measurement		
			Represents quantity of off-site generation (e.g., Community Solar) received for service period.		
	MEA04	C001	**Composite Unit of Measure**	**X**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	C00101	355	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH Kilowatt Hour		
Must Use	MEA07	935	**Measurement Significance Code**	**M**	**ID 2/2**
			Code used to benchmark, qualify or further define a measurement value		
			51 Total		

Segment:	**QTY** Quantity (Starting Bank)		
Position:	110		
Loop:	QTY	Optional	
Level:	Detail		
Usage:	Optional		
Max Use:	1		
Purpose:	To specify quantity information		
Syntax Notes:	1	At least one of QTY02 or QTY04 is required.	
	2	Only one of QTY02 or QTY04 may be present.	
Semantic Notes:	1	QTY04 is used when the quantity is non-numeric.	
Comments:			
Notes:	Required when account/service point has net metering where kWh is banked.		

QTY*QH*500*KH
  MEA*AF*PRQ*500*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier**	**M**	**ID 2/2**
			Code specifying the type of quantity		
			QH Quantity on Hold		
			Starting Bank		
Must Use	**QTY02**	**380**	**Quantity**	**M**	**R 1/15**
			Numeric value of quantity		
			Represents the kWh that were banked from prior month's excess generation.		
Must Use	**QTY03**	**C001**	**Composite Unit of Measure**	**M**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	**C00101**	**355**	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH Kilowatt Hour		

Segment:	**MEA** Measurements
Position:	160
Loop:	QTY Optional
Level:	Detail
Usage:	Optional (Dependent)
Max Use:	40
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes:	1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
	2 If MEA05 is present, then MEA04 is required.
	3 If MEA06 is present, then MEA04 is required.
	4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
	5 Only one of MEA08 or MEA03 may be present.
Semantic Notes:	1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments:	1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.
Notes:	Required when service point has a Starting Bank.

```
QTY*QH*500*KH
  MEA*AF*PRQ*500*KH***51
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Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**MEA01**	**737**	**Measurement Reference ID Code**	**M**	**ID 2/2**
			Code identifying the broad category to which a measurement applies		
			AF Actual Total		
Must Use	**MEA02**	**738**	**Measurement Qualifier**	**M**	**ID 1/3**
			Code identifying a specific product or process characteristic to which a measurement applies		
			PRQ Product Reportable Quantity		
Must Use	**MEA03**	**739**	**Measurement Value**	**M**	**R 1/20**
			The value of the measurement		
			Represents the kWh that were banked from prior month's excess generation.		
	MEA04	**C001**	**Composite Unit of Measure**	**X**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	**C00101**	**355**	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH Kilowatt Hour		
Must Use	**MEA07**	**935**	**Measurement Significance Code**	**M**	**ID 2/2**
			Code used to benchmark, qualify or further define a measurement value		
			51 Total		

Segment:	**QTY** **Quantity (Ending Bank)**		
Position:	110		
Loop:	QTY	Optional	
Level:	Detail		
Usage:	Optional		
Max Use:	1		
Purpose:	To specify quantity information		
Syntax Notes:	1	At least one of QTY02 or QTY04 is required.	
	2	Only one of QTY02 or QTY04 may be present.	
Semantic Notes:	1	QTY04 is used when the quantity is non-numeric.	
Comments:			
Notes:	Required when account/service point has net metering where kWh is banked.		

QTY*QE*500*KH
  MEA*AF*PRQ*500*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**QTY01**	**673**	**Quantity Qualifier**	**M ID 2/2**
			Code specifying the type of quantity	
			QE Quantity Deferred	
			Ending Bank	
Must Use	**QTY02**	**380**	**Quantity**	**M R 1/15**
			Numeric value of quantity	
			Represents the kWh that remains in the bank after the current period is billed.	
	QTY03	**C001**	**Composite Unit of Measure**	**O**
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	**C00101**	**355**	**Unit or Basis for Measurement Code**	**M ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			KH Kilowatt Hour	

Segment:	**MEA** Measurements
Position:	160
Loop:	QTY Optional
Level:	Detail
Usage:	Optional (Dependent)
Max Use:	40
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes:	**1** At least one of MEA03 MEA05 MEA06 or MEA08 is required.
	2 If MEA05 is present, then MEA04 is required.
	3 If MEA06 is present, then MEA04 is required.
	4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
	5 Only one of MEA08 or MEA03 may be present.
Semantic Notes:	**1** MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments:	**1** When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.
Notes:	Required when account/service point has net metering where kWh is banked.

```
QTY*QE*500*KH
  MEA*AF*PRQ*500*KH***51
```

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**MEA01**	**737**	**Measurement Reference ID Code**	**M**	**ID 2/2**
			Code identifying the broad category to which a measurement applies		
			AF Actual Total		
Must Use	**MEA02**	**738**	**Measurement Qualifier**	**M**	**ID 1/3**
			Code identifying a specific product or process characteristic to which a measurement applies		
			PRQ Product Reportable Quantity		
Must Use	**MEA03**	**739**	**Measurement Value**	**M**	**R 1/20**
			The value of the measurement		
			Represents the kWh that remains in the bank after the current period is billed.		
	MEA04	**C001**	**Composite Unit of Measure**	**X**	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	**C00101**	**355**	**Unit or Basis for Measurement Code**	**M**	**ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH Kilowatt Hour		
Must Use	**MEA07**	**935**	**Measurement Significance Code**	**M**	**ID 2/2**
			Code used to benchmark, qualify or further define a measurement value		
			51 Total		

Segment:	**PTD** Product Transfer and Resale Detail (Non-Interval Metered Services Detail)
Position:	010
Loop:	PTD Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	1 If either PTD02 or PTD03 is present, then the other is required.
	2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	PTD Loops may be sent in any order.
	Required if this is a non-interval metered account.
	Note: The sending of the PL loop is optional when this is a cancel transaction (BPT01=01).
	PTD~PL
	PTD~PL~~~OZ~EL

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PTD01	521	**Product Transfer Type Code**	M ID 2/2
			Code identifying the type of product transfer	
			PL Property Level Movement/Sale	
			A PL loop will be provided for each non-interval meter.	
	PTD04	128	**Reference Identification Qualifier**	X ID 2/3
			Code qualifying the Reference Identification	
			Ameren: Required	
			ComEd: Not Used	
			OZ Product Number	
			Commodity	
	PTD05	127	**Reference Identification**	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Ameren: Required	
			ComEd: Not Used	
			EL Electric	
			GAS Gas	

Segment:	**DTM** Date/Time Reference (Meter Change Date)		
Position:	020		
Loop:	PTD	Mandatory	
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 when a meter is changed

Used in conjunction with either the service period start date or the service period end date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.

DTM~514~20081225

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			
			514	Transferred		
				Exchanged meter read date		
Must Use	DTM02	373	**Date**		X	DT 8/8
			Date expressed as CCYYMMDD			

Segment:	**DTM** Date/Time Reference (Service Period Start)	
Position:	020	
Loop:	PTD Mandatory	
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	

This date reflects the beginning of the date range for this meter.
DTM~150~20081201

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	

Segment: **DTM** Date/Time Reference (Service Period End)
Position: 020
Loop: PTD   Mandatory
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

This date reflects the ending of the date range for this meter.

DTM~151~20081231

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		

Segment:	**REF** Reference Identification (Meter Number)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Optional
Max Use:	20
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 there is a metered account/service point and the meter is active during the service period.
	REF~MG~12345

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		
			MG Meter Number		
			Meter 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		
			Meter Number		

Segment:	**REF** Reference Identification (Special Meter Configuration)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Optional
Max Use:	20
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:	Electric: Optional
	Gas: Not Used
	REF~KY~BMG

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

KY	Site Specific Procedures, Terms, and Conditions
	Special Meter Configuration

	Ref. Des.	Data Element	Name	Attributes
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

Special Meter Configuration

AL	Auxiliary Load (ComED)
BMG	Behind the Meter Generation (Ameren)
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 (Ameren)
NM-GG	Net Metering - Gross Generation Meter (Ameren)
NM-GL	Net Metering - Gross Load Meter (Ameren)
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)

Segment:	**REF** Reference Identification (Meter Type)			
Position:	030			
Loop:	PTD Mandatory			
Level:	Detail			
Usage:	Optional			
Max Use:	20			
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~MT~KHMON			

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

    MT   Meter Ticket Number

                 Meter Type

	Ref. Des.	Data Element	Name	Attributes	
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

When REF01 is MT, the meter type is expressed as a five-character field. The first two characters are the type of consumption, the last three characters are the metering interval reported by the metering agent. Valid values can be a combination of the following values:

Type of Consumption

  K1 Kilowatt Demand (kW)
  K3 Kilovolt Amperes Reactive Hour (kVARH)
  KH Kilowatt Hour (kWh)
  TD Therms

If a meter records KW and KWH, K1 will only be sent.

Metering Interval Reported for Billing Purposes

  MON Month

For Example:

  KHMON Kilowatt Hours per month
  K1MON Kilowatt Demand per month
  TDMON Therms per month

Segment:	**REF** Reference Identification (Meter Role)		
Position:	030		
Loop:	PTD	Mandatory	
Level:	Detail		
Usage:	Optional		
Max Use:	20		
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~JH~A		

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	
			JH Tag	
			Meter Role	
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	
			Meter Role	
			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.	

	Segment:	**REF** Reference Identification (Meter Constant)
	Position:	030
	Loop:	PTD Mandatory
	Level:	Detail
	Usage:	Optional
	Max Use:	20
	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 when the value is other than 1.

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

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	**Reference Identification Qualifier**	M ID 2/3
			Code qualifying the Reference Identification	
			4P Affiliation Number	
			Meter Constant (Meter Multiplier)	
			(Ending Reading - Beginning Reading) * Meter Constant = Consumption	
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	
			Meter Constant	

Segment:	**REF** Reference Identification (Number of Dials)		
Position:	030		
Loop:	PTD	Mandatory	
Level:	Detail		
Usage:	Optional		
Max Use:	20		
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

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

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
		IX	Item Number		
			Number of Dials		
Must Use	REF02	127	**Reference Identification**	X	AN 1/3
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Number of Dials		

Segment:	**REF** Reference Identification (Transformer Loss Multiplier)		
Position:	030		
Loop:	PTD Mandatory		
Level:	Detail		
Usage:	Optional		
Max Use:	20		
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:	Electric: Required if the value is other than 1		

Gas: Not Used

An adjustment applied to meter reads to compensate for the situation when the meter voltage is different than the delivery voltage

REF~CO~1.12

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	
			CO Customer Order Number	
			Transformer Loss Multiplier	
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	
			Transformer Loss Multiplier	

Segment:	**QTY** Quantity			
Position:	110			
Loop:	QTY	Optional		
Level:	Detail			
Usage:	Optional			
Max Use:	1			
Purpose:	To specify quantity information			
Syntax Notes:	1	At least one of QTY02 or QTY04 is required.		
	2	Only one of QTY02 or QTY04 may be present.		
Semantic Notes:	1	QTY04 is used when the quantity is non-numeric.		
Comments:				
Notes:	There will be one QTY loop for each type of consumption for the meter (i.e., kW, kWh, kVARH, Therms). If a meter measures total usage, as well as on-peak and off-peak, all three values would be contained in same QTY loop.			
	Required if there are metered services on the account.			
	QTY~QD~1234~KH			

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M ID 2/2
			Code specifying the type of quantity	
			KA Estimated	
			Used when Quantity in QTY02 is Estimated	
			QD Quantity Delivered	
			Used when Quantity in QTY02 is Actual Reading	
Must Use	QTY02	380	**Quantity**	X R 1/15
			Numeric value of quantity	
			Represents quantity of consumption delivered for service period.	
Must Use	QTY03	C001	**Composite Unit of Measure**	O
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	**Unit or Basis for Measurement Code**	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1 Kilowatt Demand	
			KW	
			K3 Kilovolt Amperes Reactive Hour	
			KVARH	
			KH Kilowatt Hour	
			KWH	
			TD Therms	

Segment:	**MEA** Measurements (Readings)			
Position:	160			
Loop:	QTY	Optional		
Level:	Detail			
Usage:	Optional			
Max Use:	40			
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)			
Syntax Notes:	1	At least one of MEA03 MEA05 MEA06 or MEA08 is required.		
	2	If MEA05 is present, then MEA04 is required.		
	3	If MEA06 is present, then MEA04 is required.		
	4	If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.		
	5	Only one of MEA08 or MEA03 may be present.		
Semantic Notes:	1	MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.		
Comments:	1	When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.		

Notes: Required

MEA~AA~PRQ~87~KH~1000~1087~51
MEA~AA~PRQ~3.5~K1~~3.5~51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	MEA01	737	**Measurement Reference ID Code**	O ID 2/2
			Code identifying the broad category to which a measurement applies	
			AA	Meter reading-beginning actual/ending actual
			AE	Meter reading-beginning actual/ending estimated
			AF	Actual Total
			EA	Meter reading-beginning estimated/ending actual
			EE	Meter reading-beginning estimated/ending estimated
Must Use	MEA02	738	**Measurement Qualifier**	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			PRQ	Product Reportable Quantity
Must Use	MEA03	739	**Measurement Value**	X R 1/20
			The value of the measurement	
	MEA04	C001	**Composite Unit of Measure**	X
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	**Unit or Basis for Measurement Code**	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1	Kilowatt Demand
				KW
			K3	Kilovolt Amperes Reactive Hour
				KVARH
			KH	Kilowatt Hour
				KWH
			TD	Therms
Dep	MEA05	740	**Range Minimum**	X R 1/20
			The value specifying the minimum of the measurement range	
			Beginning Read	
			Required if the meter provides beginning reads and is measuring KWH. Not used on K1 (demand) reads.	

| Must Use | MEA06 | 741 | **Range Maximum** | | **X** | **R 1/20** |

The value specifying the maximum of the measurement range

Ending reading for the meter or single reading for K1

| Must Use | MEA07 | 935 | **Measurement Significance Code** | | **O** | **ID 2/2** |

Code used to benchmark, qualify or further define a measurement value

41	Off Peak
42	On Peak
51	Total

Segment:	**MEA** Measurements (Therm Factor)			
Position:	160			
Loop:	QTY	Optional		
Level:	Detail			
Usage:	Optional			
Max Use:	40			

Segment: **MEA** Measurements (Therm Factor)
Position: 160
Loop: QTY   Optional
Level: Detail
Usage: Optional
Max Use: 40
Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes:
1   At least one of MEA03 MEA05 MEA06 or MEA08 is required.
2   If MEA05 is present, then MEA04 is required.
3   If MEA06 is present, then MEA04 is required.
4   If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
5   Only one of MEA08 or MEA03 may be present.
Semantic Notes:
1   MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments:
1   When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.
Notes:
Electric: Not Used
Gas: Required - This factor is used to convert CCF to Therms for billing purposes.
(Ending Reading - Beginning Reading) * Meter Constant * Therm Factor = Consumption
MEA~~CF~1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	MEA02	738	**Measurement Qualifier**	**M**	**ID 1/3**
			Code identifying a specific product or process characteristic to which a measurement applies		
			CF Capacitance Out		
			Therm Factor		
Must Use	MEA03	739	**Measurement Value**	**M**	**R 1/20**
			The value of the measurement		
			Therm Factor		

Segment:	**PTD** Product Transfer and Resale Detail (Unmetered Services Summary)
Position:	010
Loop:	PTD Mandatory
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	**1** If either PTD02 or PTD03 is present, then the other is required.
	2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	For Ameren: Will be used if unmetered services are on the account. Also, in the rare cases when an adjustment to the usage is requested by the customer and a cancel and rebill will not handle the adjustment amount. The adjustment could be for metered services. Ameren may have more than one BC loop per transaction as they will keep all adjustments in separate BC loops.
	For ComEd: Will be used if unmetered services are on the account. ComEd will never have more than one BC loop per transaction.
	Note: The sending of the PL loop is optional when this is a cancel transaction (BPT01=01).
	PTD~BC
	PTD~BC~~~OZ~EL

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**PTD01**	**521**	**Product Transfer Type Code**	**M**	**ID 2/2**
			Code identifying the type of product transfer		
			BC Issue - Other Agency		
			A BC loop will be sent for unmetered services or adjustments on the account/service point.		
	PTD04	**128**	**Reference Identification Qualifier**	**X**	**ID 2/3**
			Code qualifying the Reference Identification		
			Ameren: Required ComEd: Not Used		
			OZ Product Number		
			Commodity		
	PTD05	**127**	**Reference Identification**	**X**	**AN 1/30**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Ameren: Required ComEd: Not Used		
			EL Electric		
			GAS Gas		

Segment:	**DTM** Date/Time Reference (Service Period Start)				
Position:	020				
Loop:	PTD Mandatory				
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:	Required				

Notes (shaded box):

Required

This date reflects the beginning of the date range for this unmetered service.

DTM~150~20081201

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		

	Segment:	**DTM** Date/Time Reference (Service Period End)
	Position:	020
	Loop:	PTD Mandatory
	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:	Required
		This date reflects the ending of the date range for this unmetered service.
		DTM~151~20081231

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		

			Segment:	**REF** Reference Identification (Meter Role)

Segment: **REF** Reference Identification (Meter Role)
Position: 030
Loop: PTD   Mandatory
Level: Detail
Usage: Optional
Max Use: 20
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: Optional

The PTD*BC loop, including this segment, may be used to provide adjustments to usage that cannot be associated to specific meter readings.
REF~JH~S

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	
			JH Tag	
			Meter Role	
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	
			Meter Role	
			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.	

Segment:	**REF** Reference Identification (Adjustment Reason)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Optional
Max Use:	20
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 there is adjusted usage
	REF~AM~02
	REF~AM~01~102.345

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

		AM	Adjustment Memo (Charge Back)

Adjustment Reason

	Ref. Des.	Data Element	Name	Attributes
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

Adjustment Reason

01	Fast meter
02	Slow meter
03	Stopped meter
04	Unmetered adjustment
05	Cut in flat
06	Other % increase
07	Other % decrease
08	Free service
09	Revenue protection
10	Revenue protection - unmeasured

	Ref. Des.	Data Element	Name	Attributes
	REF03	352	**Description**	**O AN 1/80**

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

Electric: Not Used
Gas: Additional information regarding the adjustment. For example, Ameren may provide the percent of the adjustment.

Segment:	**QTY** Quantity				
Position:	110				
Loop:	QTY	Optional			
Level:	Detail				
Usage:	Optional				
Max Use:	1				
Purpose:	To specify quantity information				
Syntax Notes:	1	At least one of QTY02 or QTY04 is required.			
	2	Only one of QTY02 or QTY04 may be present.			
Semantic Notes:	1	QTY04 is used when the quantity is non-numeric.			
Comments:					

Notes: This loop is required when there are unmetered services on the account. This will contain the total quantity for the unmetered services.
QTY~QD~150~KH

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**QTY01**	**673**	**Quantity Qualifier**		**M** **ID 2/2**
			Code specifying the type of quantity		
			QD	Quantity Delivered	
			Whether unmetered services are estimated, calculated or actual, the code will be QD.		
Must Use	**QTY02**	**380**	**Quantity**		**X** **R 1/15**
			Numeric value of quantity		
			Represents quantity of consumption delivered for service period		
Must Use	**QTY03**	**C001**	**Composite Unit of Measure**		**O**
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	**C00101**	**355**	**Unit or Basis for Measurement Code**		**M** **ID 2/2**
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			KH	Kilowatt Hour	
				KWH	
			TD	Therms	

Segment:	**MEA** Measurements			
Position:	160			
Loop:	QTY	Optional		
Level:	Detail			
Usage:	Optional			
Max Use:	40			

Segment: **MEA** Measurements
Position: 160
Loop: QTY Optional
Level: Detail
Usage: Optional
Max Use: 40
Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes:
1. At least one of MEA03 MEA05 MEA06 or MEA08 is required.
2. If MEA05 is present, then MEA04 is required.
3. If MEA06 is present, then MEA04 is required.
4. If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
5. Only one of MEA08 or MEA03 may be present.

Semantic Notes:
1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:
1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes: Optional

The PTD*BC loop, including this segment, may be used to provide adjustments to usage that cannot be associated to specific meter readings.
MEA*AF*PRQ*1000*KH***51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	MEA01	737	**Measurement Reference ID Code**	M	ID 2/2
			Code identifying the broad category to which a measurement applies		
			AF Actual Total		
Must Use	MEA02	738	**Measurement Qualifier**	X	ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies		
			PRQ Product Reportable Quantity		
Must Use	MEA03	739	**Measurement Value**	X	R 1/20
			The value of the measurement		
Must Use	MEA04	C001	**Composite Unit of Measure**	X	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	C00101	355	**Unit or Basis for Measurement Code**	M	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			K1 Kilowatt Demand		
			KH Kilowatt Hour		
			TD Therms		
Must Use	MEA07	935	**Measurement Significance Code**	O	ID 2/2
			Code used to benchmark, qualify or further define a measurement value		
			41 Off Peak		
			42 On Peak		
			51 Total		

Segment:	**PTD** Product Transfer and Resale Detail (Interval Metered Services Detail)		
Position:	010		
Loop:	PTD Mandatory		
Level:	Detail		
Usage:	Mandatory		
Max Use:	1		
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data		
Syntax Notes:	1 If either PTD02 or PTD03 is present, then the other is required.		
	2 If either PTD04 or PTD05 is present, then the other is required.		
Semantic Notes:			
Comments:			
Notes:	PTD Loops may be sent in any order.		
	Required if this is an interval metered account.		
	Note: The sending of the PM loop is optional when this is a cancel transaction (BPT01=01).		
	PTD~PM		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**PTD01**	**521**	**Product Transfer Type Code**	**M ID 2/2**
			Code identifying the type of product transfer	
			PM Physical Meter Information	
			A PM loop will be provided for each interval meter.	
	PTD04	**128**	**Reference Identification Qualifier**	**X ID 2/3**
			Code qualifying the Reference Identification	
			Ameren: Required	
			ComEd: Not Used	
			OZ Product Number	
			Commodity	
	PTD05	**127**	**Reference Identification**	**X AN 1/30**
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Ameren: Required	
			ComEd: Not Used	
			EL Electric	

Segment:	**DTM** Date/Time Reference (Meter Change Date)
Position:	020
Loop:	PTD Mandatory
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 when a meter is changed
	Used in conjunction with either the service period start date or the service period end date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.
	DTM~514~20081225

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		
			514 Transferred		
			Exchanged meter read date		
Must Use	DTM02	373	**Date**	X	DT 8/8
			Date expressed as CCYYMMDD		

Segment:	**DTM** Date/Time Reference (Service Period Start)	
Position:	020	
Loop:	PTD Mandatory	
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	

This date reflects the beginning of the date range for this meter.

DTM~150~20081201

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	

Segment:	**DTM** Date/Time Reference (Service Period End)		
Position:	020		
Loop:	PTD	Mandatory	
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		
	This date reflects the ending of the date range for this meter.		
	DTM~151~20081231		

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	

Segment:	**REF** Reference Identification (Meter Number)	
Position:	030	
Loop:	PTD Mandatory	
Level:	Detail	
Usage:	Optional	
Max Use:	20	
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 there is a metered account/service point and the meter is active during the service period. REF~MG~12345	

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	
			MG Meter Number	
			Meter 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	
			Meter Number	

Segment:	**REF** Reference Identification (Special Meter Configuration)			

Segment: **REF** Reference Identification (Special Meter Configuration)
Position: 030
Loop: PTD   Mandatory
Level: Detail
Usage: Optional
Max Use: 20
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~KY~AL

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

     KY   Site Specific Procedures, Terms, and Conditions

Special Meter Configuration

	Ref. Des.	Data Element	Name	Attributes	
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

Special Meter Configuration

AL	Auxiliary Load (ComED)
BMG	Behind the Meter Generation (Ameren)
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 (Ameren)
NM-GG	Net Metering - Gross Generation Meter (Ameren)
NM-GL	Net Metering - Gross Load Meter (Ameren)
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)

Segment:	**REF** Reference Identification (Meter Type)		
Position:	030		
Loop:	PTD Mandatory		
Level:	Detail		
Usage:	Optional		
Max Use:	20		
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~MT~K1060		

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

  MT   Meter Ticket Number

  Meter Type

	Ref. Des.	Data Element	Name	Attributes
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

When REF01 is MT, the meter type is expressed as a five-character field. The first two characters are the type of consumption; the last three characters are the metering interval reported by the metering agent. Valid values can be a combination of the following values:

Type of Consumption

  K1 Kilowatt Demand (kW)
  K3 Kilovolt Amperes Reactive Hour (kVARH)
  KH Kilowatt Hour (kWh)

If a meter records KW and KWH, K1 will only be sent.

Metering Interval Reported for Billing Purposes

nnn Number of minutes from 001 to 999
  015 15 minute interval
  060 60 minute interval
For Example:

  KH060 Kilowatt Hours per 60 minute interval
  K1060 Kilowatt Demand per 60 minute interval

Segment:	**REF** Reference Identification (Meter Role)				
Position:	030				
Loop:	PTD	Mandatory			
Level:	Detail				
Usage:	Optional				
Max Use:	20				
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~JH~A				

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		
			JH	Tag	
			Meter Role		
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		
			Meter Role		
			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.	

Segment:		**REF** Reference Identification (Meter Constant)			
Position:		030			
Loop:		PTD	Mandatory		
Level:		Detail			
Usage:		Optional			
Max Use:		20			
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 when the value is other than 1.

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

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier**	**M**	**ID 2/3**
			Code qualifying the Reference Identification		
			4P Affiliation Number		
			Meter Constant (Meter Multiplier)		
			(Ending Reading - Beginning Reading) * Meter Constant = Consumption		
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		
			Meter Constant		

Segment:	**REF** Reference Identification (Number of Dials)
Position:	030
Loop:	PTD Mandatory
Level:	Detail
Usage:	Optional
Max Use:	20
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

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

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			IX Item Number		
			Number of Dials		
Must Use	REF02	127	**Reference Identification**	X	AN 1/3
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Number of Dials		

	Segment:	**REF** Reference Identification (Transformer Loss Multiplier)
	Position:	030
	Loop:	PTD Mandatory
	Level:	Detail
	Usage:	Optional
	Max Use:	20
	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 the value is other than 1

An adjustment applied to meter reads to compensate for the situation when the meter voltage is different than the delivery voltage
REF~CO~1.12

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			
			CO	Customer Order Number		
			Transformer Loss Multiplier			
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			
			Transformer Loss Multiplier			

Segment:		# QTY **Quantity**		
Position:		110		
Loop:		QTY	Optional	
Level:		Detail		
Usage:		Optional		
Max Use:		1		
Purpose:		To specify quantity information		
Syntax Notes:		1	At least one of QTY02 or QTY04 is required.	
		2	Only one of QTY02 or QTY04 may be present.	
Semantic Notes:		1	QTY04 is used when the quantity is non-numeric.	
Comments:				
Notes:		There will be one QTY loop for each type of consumption for the meter (i.e., kW, kWh, kVARH). If a meter measures total usage, as well as on-peak and off-peak, all three values would be contained in same QTY loop.		
		Required if there are metered services on the account.		
		QTY~QD~1234~KH		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M ID 2/2
			Code specifying the type of quantity	
			KA	Estimated
				Used when Quantity in QTY02 is Estimated
			QD	Quantity Delivered
				Used when Quantity in QTY02 is Actual Reading
Must Use	QTY02	380	**Quantity**	X R 1/15
			Numeric value of quantity	
			Represents quantity of consumption delivered for service period.	
Must Use	QTY03	C001	**Composite Unit of Measure**	O
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	**Unit or Basis for Measurement Code**	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1	Kilowatt Demand
				KW
			K3	Kilovolt Amperes Reactive Hour
				KVARH
			KH	Kilowatt Hour
				KWH

Segment:	**MEA** Measurements (Readings)	
Position:	160	
Loop:	QTY	Optional
Level:	Detail	
Usage:	Optional	
Max Use:	40	
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)	
Syntax Notes:	1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.	
	2 If MEA05 is present, then MEA04 is required.	
	3 If MEA06 is present, then MEA04 is required.	
	4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.	
	5 Only one of MEA08 or MEA03 may be present.	
Semantic Notes:	1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.	
Comments:	1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.	

Notes:	Required
	MEA~~PRQ~8955~KH~~~51
	MEA~~PRQ~17910~K1~~~51

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	MEA02	738	**Measurement Qualifier**	O	ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies		
			PRQ Product Reportable Quantity		
Must Use	MEA03	739	**Measurement Value**	X	R 1/20
			The value of the measurement		
Must Use	MEA04	C001	**Composite Unit of Measure**	X	
			To identify a composite unit of measure (See Figures Appendix for examples of use)		
Must Use	C00101	355	**Unit or Basis for Measurement Code**	M	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			K1 Kilowatt Demand		
			KW		
			K3 Kilovolt Amperes Reactive Hour		
			KVARH		
			KH Kilowatt Hour		
			KWH		
Must Use	MEA07	935	**Measurement Significance Code**	O	ID 2/2
			Code used to benchmark, qualify or further define a measurement value		
			41 Off Peak		
			42 On Peak		
			51 Total		

Segment:	**DTM** Date/Time Reference (Report Period)				
Position:	210				
Loop:	QTY	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:	End date and time of the period for which the quantity is provided. Time will include zone. Each interval must be explicitly labeled with the date and time.				

Required

DTM~582~20081215~1500

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

	582		Report Period	
			The date/time of the end of the interval	

Must Use	DTM02	373	**Date**	X	DT 8/8

Date expressed as CCYYMMDD

Must Use	DTM03	337	**Time**	X	TM 4/8

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

HHMM format

Segment:	**SE** Transaction Set Trailer
Position:	030
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~21~00000001

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 #1 – Monthly Usage for One Meter with kW and kWh

ComEd	Ameren
ST~867~0007| BPT~00~2025-06-14-041911926300000CMED~20250613~DD| DTM~649~20250618~1700| N1~8S~COMMONWEALTH EDISON CO~1~006929509| N1~SJ~Supplier~1~111111111| N1~8R~Customer Name| REF~12~1234567890~GROUPB| REF~BLT~LDC| REF~PC~DUAL| REF~9V~Y| PTD~SU| DTM~150~20250514| DTM~151~20250613| REF~NH~R73| REF~LO~28| REF~PTC~~SG05| QTY~QD~2887~KH| MEA~AA~PRQ~2887~KH~~~51| MEA~AA~PRQ~5.11~K1~~~42| MEA~AA~PRQ~5.32~K1~~~41| PTD~PL| DTM~150~20250514| DTM~151~20250613| REF~MG~230061111| REF~KY~GS| REF~MT~K1MON| REF~JH~A| REF~4P~000001.0000| REF~IX~5.0| QTY~QD~2887~KH| MEA~AA~PRQ~2887~KH~66427~69314~51| MEA~AA~PRQ~5.11~K1~~5.11~42| MEA~AA~PRQ~5.32~K1~~5.32~41| SE~34~0007|	

Example #2 – Monthly Usage for Unmetered Service

ComEd	Ameren

ST~867~0006
BPT~00~2025-06-14-041806774256047CMED~20250613~DD
DTM~649~20250618~1700
N1~8S~COMMONWEALTH EDISON CO~1~006929509
N1~SJ~Supplier~1~111111111
N1~8R~Customer Name
  REF~12~1234567890~GROUPD
  REF~BLT~LDC
  REF~PC~DUAL
  REF~9V~Y
PTD~SU
  DTM~150~20250514
  DTM~151~20250613
  REF~NH~R85
  REF~LO~37
  REF~PTC~~SG03
  QTY~QD~427~KH
    MEA~AA~PRQ~427~KH~~~51
PTD~BC
  DTM~150~20250514
  DTM~151~20250613
  QTY~QD~427~KH
SE~23~0006
	ST*867*0001
	BPT*00*123465789020250331 1002*20250331*DD
	DTM*649*20250404*144500
	N1*8S*AMEREN ILLINOIS*1*006936017
	N1*SJ*Supplier*9*007909111IL00
	N1*8R*CUSTOMER NAME
	  REF*12*1234567890*GROUPB
	  REF*LU*12345678
	  REF*SPL*RATE ZONE I
	  REF*BLT*LDC
	  REF*PC*DUAL
	  REF*9V*Y
	PTD*SU***OZ*EL
	  DTM*150*20250227
	  DTM*151*20250328
	  REF*NH*DS5*DS-5 Non-Residential Lighting
	  REF*LO*LITE
	  REF*AN*N
	  QTY*QD*35*KH
	    MEA*AA*PRQ*35*KH***51
	PTD*BC***OZ*EL
	  DTM*150*20250227
	  DTM*151*20250328
	  REF*JH*A
	  QTY*QD*35*KH
	SE*26*0001

Example #3 – Interval Usage with Net Meter

Ameren

```
ST*867*0029
BPT*00*1111058006202509081001*20250908*C1
N1*8S*AMEREN ILLINOIS*1*006936017
N1*SJ*Supplier Name*1*111111111
N1*8R*JANE Q. CUSTOMER
  REF*12*1111058006*GROUPA
  REF*LU*77123456
  REF*SPL*RATE ZONE II
  REF*BLT*LDC
  REF*PC*LDC
  REF*9V*Y
PTD*SU***OZ*EL
  DTM*150*20250805
  DTM*151*20250904
  DTM*978****MM*04
  REF*NH*DS1*DS-1 Residential Delivery Serv
  REF*LO*IDR
  QTY*QD*414*KH
    MEA*AA*PRQ*414*KH***51
  QTY*87*448*KH
    MEA*AA*PRQ*448*KH***51
  QTY*QH*0*KH
    MEA*AA*PRQ*0*KH***51
PTD*PM***OZ*EL
  DTM*150*20250805
  DTM*151*20250904
  REF*MG*72354444
  REF*KY*NM-BI
  REF*MT*KH015
  REF*JH*A
  QTY*QD*.0744*KH
    MEA**PRQ*.0744*KH***51
    MEA**PRQ*.2976*K1***51
    DTM*582*20250806*0015
  QTY*QD*.0558*KH
    MEA**PRQ*.0558*KH***51
    MEA**PRQ*.2232*K1***51
    DTM*582*20250806*0030
  QTY*QD*.0636*KH
    MEA**PRQ*.0636*KH***51
    MEA**PRQ*.2544*K1***51
    DTM*582*20250806*0045
  QTY*QD*.2922*KH
    MEA**PRQ*.2922*KH***51
    MEA**PRQ*1.1688*K1***51
    DTM*582*20250806*0100
... skipped intervals
```

```
... continued from 1st column
  QTY*QD*.0468*KH
    MEA**PRQ*.0468*KH***51
    MEA**PRQ*.1872*K1***51
    DTM*582*20250904*2345
  QTY*QD*.0558*KH
    MEA**PRQ*.0558*KH***51
    MEA**PRQ*.2232*K1***51
    DTM*582*20250904*2359
PTD*PM***OZ*EL
  DTM*150*20250805
  DTM*151*20250904
  REF*MG*72354444
  REF*KY*NM-BI
  REF*MT*KH015
  REF*JH*S
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250806*0015
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250806*0030
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250806*0045
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250806*0100
.... skipped intervals

  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250904*2300
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250904*2315
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250904*2330
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250904*2345
  QTY*QD*0*KH
    MEA**PRQ*0*KH***51
    MEA**PRQ*0*K1***51
    DTM*582*20250904*2359
SE*23078*0029
```

Example #4 – Interval Usage
ComEd

```
ST~867~0002
BPT~00~2025-08-20-063748702601234CMED~20250819~C1
DTM~649~20250822~1700
N1~8S~COMMONWEALTH EDISON CO~1~006929509
N1~SJ~Supplier Name~1~111111111
N1~8R~Jane Q Customer
  REF~12~0115951111~GROUPA
  REF~BLT~LDC
  REF~PC~DUAL
  REF~9V~Y
PTD~SU
  DTM~150~20250721
  DTM~151~20250819
  REF~NH~R70
  REF~LO~23
  REF~PTC~~SG01
  QTY~QD~437.88~KH
    MEA~AA~PRQ~437.88~KH~~~51
    MEA~AA~PRQ~2.57~K1~~~42
    MEA~AA~PRQ~3.74~K1~~~41
PTD~PM
  DTM~150~20250721
  DTM~151~20250819
  REF~MT~K1030
  REF~KY~IO
  REF~MG~273791111
  REF~JH~A
  REF~4P~000002.0000
  REF~IX~5.0
  QTY~QD~0.6675~KH
    MEA~~PRQ~0.6675~KH~~~51
    MEA~~PRQ~1.335~K1~~~51
    DTM~582~20250721~0030
  QTY~QD~0.5075~KH
    MEA~~PRQ~0.5075~KH~~~51
    MEA~~PRQ~1.015~K1~~~51
    DTM~582~20250721~0100
... skipped intervals

  QTY~QD~0.3675~KH
    MEA~~PRQ~0.3675~KH~~~51
    MEA~~PRQ~0.735~K1~~~51
    DTM~582~20250818~2330
  QTY~QD~0.37~KH
    MEA~~PRQ~0.37~KH~~~51
    MEA~~PRQ~0.74~K1~~~51
    DTM~582~20250818~2359
```

```
PTD~PM
  DTM~150~20250721
  DTM~151~20250819
  REF~MT~K1030
  REF~KY~IO
  REF~MG~273791111
  REF~JH~S
  REF~4P~000002.0000
  REF~IX~5.0
  QTY~QD~0~KH
    MEA~~PRQ~0~KH~~~51
    MEA~~PRQ~0~K1~~~51
    DTM~582~20250721~0030
  QTY~QD~0~KH
    MEA~~PRQ~0~KH~~~51
    MEA~~PRQ~0~K1~~~51
    DTM~582~20250721~0100
... skipped intervals

  QTY~QD~0~KH
    MEA~~PRQ~0~KH~~~51
    MEA~~PRQ~0~K1~~~51
    DTM~582~20250818~2330
  QTY~QD~0~KH
    MEA~~PRQ~0~KH~~~51
    MEA~~PRQ~0~K1~~~51
    DTM~582~20250818~2359
SE~11175~0002
```

Example #5 – Gas Monthly Usage
Ameren Gas

```
ST*867*0001
BPT*00*1088233003201310010001*20131002*DD
N1*8S*AMEREN ILLINOIS*1*006936017
N1*SJ*ABC ENERGY*1*192834560
N1*8R*CUSTOMER TWO
   REF*12*1088232997
   REF*LU*73248964
   REF*SPL*RATE ZONE II
   REF*BLT*DUAL
   REF*PC*DUAL
PTD*SU***OZ*GAS
   DTM*150*20130901
   DTM*151*20131001
   REF*NH*GDS*GDS-2 Small Gen Gas Del-Sp Ht
   QTY*QD*30*TD
      MEA*AA*PRQ*30*TD***51
PTD*PL***OZ*GAS
   DTM*150*20130901
   DTM*151*20131001
   REF*MG*20734697
   REF*MT*TDMON
   REF*JH*A
   REF*4P*000001.0000
   REF*IX*4.0
   REF*CO*0
   QTY*QD*30*TD
      MEA*AA*PRQ*30*TD***51
      MEA**CF*1
SE*29*0001
```

Example #5 – Meter Exchange for 867 Monthly Usage

ComEd	Ameren
ST~867~0026	ST*867*0075
BPT~00~2025-08-28-012407001511111CMED~20250827~DD	BPT*00*12345679020250328 1001*20250331*DD
DTM~649~20250902~1700	DTM*649*20250404*144500
N1~8S~COMMONWEALTH EDISON CO~1~006929509	N1*8S*AMEREN ILLINOIS*1*006936017
N1~SJ~Supplier Name~1~111111111	N1*SJ*Supplier*1*111111111
N1~8R~Customer Name	N1*8R*CUSTOMER NAME
REF~11~11111111	REF*12*1234567890*GROUPA
REF~12~4240411111~GROUPB	REF*LU*12345678
REF~BLT~LDC	REF*SPL*RATE ZONE III
REF~PC~DUAL	REF*BLT*LDC
REF~9V~Y	REF*PC*DUAL
PTD~SU	REF*9V*Y
DTM~150~20250711	PTD*SU***OZ*EL
DTM~151~20250811	DTM*150*20250114
REF~NH~R73	DTM*151*20250212
REF~LO~28	DTM*978****MM*00
REF~PTC~~SG05	REF*NH*DS1*DS-1 Residential Delivery Serv
QTY~QD~120~KH	REF*LO*RESDLL-IP
MEA~EE~PRQ~120~KH~~~51	QTY*QD*518*KH
MEA~EE~PRQ~4.776~K1~~~42	MEA*AA*PRQ*518*KH***51
MEA~EE~PRQ~4.584~K1~~~41	PTD*PL***OZ*EL
PTD~PL	DTM*150*20250114
DTM~151~20250811	DTM***514**20250203
DTM~**514**~20250721	REF*MG*25926358
REF~MG~230382222	REF*MT*K1MON
REF~KY~GS	REF*JH*A
REF~MT~K1MON	REF*IX*6.0
REF~JH~A	QTY*QD*385*KH
REF~4P~000060.0000	MEA*AA*PRQ*385*KH*20674*21059*51
REF~IX~5.0	MEA*AA*PRQ*147*KH*999853*0*42
QTY~KA~120~KH	MEA*AA*PRQ*238*KH*999762*0*41
MEA~EE~PRQ~120~KH~0~2~51	MEA*AA*PRQ*4.774*K1***42
MEA~EE~PRQ~4.776~K1~~4.776~42	MEA*AA*PRQ*3.446*K1***41
MEA~EE~PRQ~4.584~K1~~4.584~41	PTD*PL***OZ*EL
PTD~PL	DTM***514**20250203
DTM~150~20250711	DTM*151*20250212
DTM~**514**~20250721	REF*MG*25926358
REF~MG~230131111	REF*MT*KHMON
REF~KY~GS	REF*JH*A
REF~MT~K1MON	REF*IX*6.0
REF~JH~A	QTY*QD*133*KH
REF~4P~000060.0000	MEA*AA*PRQ*133*KH*21059*21192*51
REF~IX~5.0	SE*43*0075
QTY~KA~0~KH	
MEA~EE~PRQ~0~KH~10782~10782~51	
MEA~EE~PRQ~4.776~K1~~4.776~42	
MEA~EE~PRQ~4.584~K1~~4.584~41	
SE~48~0026	