

**Illinois**

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

Transaction Set  
ANSI ASC X12 Version 004010

**867**  
**Monthly Usage**  
Version 2.3

## Summary of Changes

- |                                  |  |
|----------------------------------|--|
| January 6, 2009                  | <ul style="list-style-type: none"><li>• Initial Release.</li></ul>   |
| October 24, 2009<br>Version 1.1  | <ul style="list-style-type: none"><li>• <b>Change Control #004</b> – Corrected REF*CO to indicate that it is only required if value is other than 1.</li><li>• <b>Change Control #005</b> – Corrected value CI in BPT04 to C1.</li><li>• <b>Change Control #015</b> – 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).</li></ul>   |
| November 5, 2009<br>Version 1.2  | <ul style="list-style-type: none"><li>• <b>Change Control #011</b> – Added Meter Role (REF*JH) and Measurement (MEA) segments to allow for adjusted usage in the PTD*BC Unmetered Services loop.</li></ul>   |
| January 6, 2011<br>Version 1.3   | <ul style="list-style-type: none"><li>• <b>Change Control #016</b> – Updated POR Eligibility Group Codes.</li><li>• <b>Change Control #018</b> – 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.</li><li>• <b>Change Control #021</b> – Changed POR Eligibility Group (REF03 of REF*12) and Payment Option (REF*9V) to be optional on Cancel.</li><li>• <b>Change Control #022</b> – Added REF*SPL for Ameren’s Rate Zone.</li><li>• Corrected X12 values under “Attributes” column and headings of each page.</li></ul> |
| April 18, 2012<br>Version 1.4    | <ul style="list-style-type: none"><li>• <b>Change Control #038</b> – Added BPT07 code “F” (Final) indicator.</li></ul>   |
| May 31, 2013<br>Version 2.0      | <ul style="list-style-type: none"><li>• <b>Change Control #040</b> – Added requirements for Ameren Gas</li></ul>   |
| October 14, 2013<br>Version 2.1  | <ul style="list-style-type: none"><li>• <b>Change Control #041</b> – Added examples for Ameren Gas and updated electric examples</li></ul>   |
| October 15, 2016<br>Version 2.2  | <ul style="list-style-type: none"><li>• <b>Change Control #047</b> – 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.</li></ul>   |
| November 16, 2018<br>Version 2.3 | <ul style="list-style-type: none"><li>• <b>Change Control #051</b> – 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.</li></ul>   |

## 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.

Community Solar  
(Community Supply)

- Community Solar (also known by ComEd as Community Supply) is a program that allows customers who cannot or do not want to install solar on their property, the ability to utilize solar energy to reduce their electric bill and promote the environment via subscriptions to solar projects. When customers enroll in a Community Solar project, the utility will send a Community Solar Participant Indicator (REF\*AN) of “Y” on the 814 Enrollment Response or 814 Change Request transaction. The customer’s account is credited with the kWh from the Community Solar project according to their subscription and the details are provided to the supplier at an interval level on the 867 Monthly Usage transaction.
- The Community Solar data will always be provided at the interval level where the 867 Monthly Usage Report Type Code (BPT04) will either be C1 if all the usage on the account is sent at an interval level, or DR if some of the usage is summarized while the Community Solar, or possibly a portion of the On-site generation is at the interval level.
  - For Ameren,
    - The Summary Loop (PTD\*SU) will contain the total consumption as it does today, as well as 3 new fields including Total On-site Generation, Total Off-site Generation (Community Solar) and a Starting Bank. These three new fields should give full visibility in the PTD\*SU loop as to what the customer should be billed.
    - A separate PTD\*PM loop will be sent for Community Solar with a Meter Role of Subtractive (REF\*JH\*S) and a Meter Number of COMSLR (REF\*MG\*COMSLR).
    - The start and end dates for the pseudo meter loop (DTM\*150 and DTM\*151) will match the start and end dates for the metered service.
  - For ComEd,
    - The Summary Loop (PTD\*SU) will only contain the total consumption as it does today. The RES must look to the interval detail loop for the Community Solar generation.
    - A separate PTD\*PM loop will be sent for Community Solar with a Meter Role of Subtractive (REF\*JH\*S) and a Meter number that begins with a 6.
    - A pseudo meter is used to measure the kWh credited to the Community Solar customer and is identified with the Special Meter Configuration code “VO” (REF\*KY\*VO).
- Each submitted transaction may be valid for only one commodity (i.e., electric or gas).

One Commodity per  
Transaction

# 867 Product Transfer and Resale Report

Functional Group ID=**PT**

## 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:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	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:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - 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:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	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**

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element Name</b>	
Must Use	ST01	143 Transaction Set Identifier Code Code uniquely identifying a Transaction Set 867 Product Transfer and Resale Report	M ID 3/3
Must Use	ST02	329 Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BPT01	353	<b>Transaction Set Purpose Code</b> 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.	M ID 2/2
Must Use	BPT02	127	<b>Reference Identification</b> 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.	O AN 1/30
Must Use	BPT03	373	<b>Date</b> Date expressed as CCYYMMDD Transaction Creation Date. This is the date that the transaction was created by the sender's application system.	M DT 8/8
Must Use	BPT04	755	<b>Report Type Code</b> 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	O ID 2/2
Dep	BPT07	306	<b>Action Code</b> Code indicating type of action Ameren: Not Used	O ID 1/2



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.

<b>Dep</b>	<b>BPT09</b>	<b>127</b>	<b>Reference Identification</b>	<b>O AN 1/30</b>
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F Final

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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 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.	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8
Must Use	DTM03	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) HHMM format	X TM 4/8

**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**

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element Name</b>	
Must Use	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 8S Consumer Service Provider (CSP) Utility	M ID 2/3
Must Use	N102	93 Name Free-form name Utility Name	X AN 1/60
Must Use	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	X ID 1/2
Must Use	N104	67 Identification Code Code identifying a party or other code Utility D-U-N-S or D-U-N-S+4 Number	X AN 9/13

**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**

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element Name</b>	
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)	
Must Use	N102	93 Name	X AN 1/60
		Free-form name	
		RES/GS 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 9/80
		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

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element Name</b>	
<b>Must Use</b>	<b>N101</b>	<b>98 Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual 8R Consumer Service Provider (CSP) Customer Customer Name	<b>X ID 2/3</b>
<b>Must Use</b>	<b>N102</b>	<b>93 Name</b> Free-form name Customer Name	<b>X AN 1/60</b>

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 11 Account Number Retail Electric Supplier (RES) or Gas Supplier (GS) Account Number	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier RES/GS Account Number	X AN 1/30

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 12 Billing Account Utility Account Number	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Utility Account Number	X AN 1/30
Dep	REF03	352	<b>Description</b> 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	X AN 1/80

**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**

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification BLT Billing Type Bill Presenter	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DUAL The Utility and RES/GS both Present Bills to the Customer ESP RES/GS Presents the Consolidated Bill to the Customer LDC Utility Presents the Consolidated Bill to the Customer Used for both Rate Ready and Bill Ready Utility Consolidated Billing	X AN 1/30

**Segment:** **REF** Reference Identification (Bill Calculator)  
**Position:** 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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification PC Production Code Identifies the party that is to calculate their charges for the bill.	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DUAL Each party calculates its own charges 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	X AN 1/30

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 9V Payment Category Indicates whether the customer is to be part of the Purchase of Receivables (POR) program.	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> 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.	X AN 1/30

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			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:** **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  
 There will only be 1 PTD~SU loop per transaction  
 PTD~SU  
 PTD~SU~~~OZ~EL

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>		
<b>Must Use</b>	<b>PTD01</b>	<b>521 Product Transfer Type Code</b> 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.	<b>M ID 2/2</b>
	<b>PTD04</b>	<b>128 Reference Identification Qualifier</b> Code qualifying the Reference Identification Ameren: Required ComEd: Not Used OZ Product Number Commodity	<b>X ID 2/3</b>
	<b>PTD05</b>	<b>127 Reference Identification</b> 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	<b>X AN 1/30</b>

**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**

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

**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**

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

**Segment:** **DTM** Date/Time Reference (Net Metering Anniversary Month)  
**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:**

Ameren: Sent when a customer 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.  
 ComEd: Not Used  
 DTM~978~~~~MM~04  
 DTM~978~~~~MM~10

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time 978 Plan Anniversary Net Metering Anniversary Month	<b>M ID 3/3</b>
Must Use	DTM05	1250	<b>Date Time Period Format Qualifier</b> Code indicating the date format, time format, or date and time format MM Month of Year in Numeric Format	<b>X ID 2/3</b>
Must Use	DTM06	1251	<b>Date Time Period</b> Expression of a date, a time, or range of dates, times or dates and times Net Metering Anniversary Month	<b>X AN 1/35</b>



**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**

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
Must Use	<b>REF01</b>	<b>128</b>	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification NH Rate Card Number Utility Rate Class	<b>M ID 2/3</b>
Must Use	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Utility Rate Class	<b>X AN 1/30</b>
	<b>REF03</b>	<b>352</b>	<b>Description</b> A free-form description to clarify the related data elements and their content Text Description of Rate Class	<b>X AN 1/80</b>

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification LO Load Planning Number Load Profile	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Load Profile	X AN 1/30

**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**

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

**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: Required of customer is a participant in Community Solar  
Gas: Not Used  
REF~AN~N

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification AN Associated Purchase Orders Community Solar Participant Indicator	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier N No Y Yes This customer does not participate in Community Solar for this Service Point (Ameren) This customer participates in Community Solar for this Service Point (Ameren)	X AN 1/30

**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  
 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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity	M ID 2/2
			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 Numeric value of quantity	X R 1/15
			Represents quantity of consumption delivered for service period	
Must Use	QTY03	C001	Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	O
Must Use	C00101	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M ID 2/2
			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**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			87 Quantity Received	
			9H Estimated Duration	
			Total On-Site Generation (Actual)	
			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:**

**Comments:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 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**

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



**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: Required 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**

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

**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:**

**Comments:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 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 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**

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

**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:**

Ameren: Required when service point has a Starting Bank.  
 ComEd: Not Used  
 QTY\*QH\*500\*KH  
 MEA\*AF\*PRQ\*500\*KH\*\*\*51

**Data Element Summary**

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

**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:**

**Comments:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 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 a Starting Bank.  
 ComEd: Not Used  
 QTY\*QH\*500\*KH  
 MEA\*AF\*PRQ\*500\*KH\*\*\*51

**Data Element Summary**

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

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time 514 Transferred Exchanged meter read date	<b>M ID 3/3</b>
Must Use	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	<b>X DT 8/8</b>

**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**

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

**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**

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



**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification MG Meter Number Meter Number	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Number	X AN 1/30

**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

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification KY Site Specific Procedures, Terms, and Conditions Special Meter Configuration	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> 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) VO Community Solar Meter (ComEd) The pseudo meter for Community Solar will always start with a 6. XY Rider VA Gen Meter (ComEd)	X AN 1/30

**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~KHMOM

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification MT Meter Ticket Number Meter Type	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier 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:  KHMOM Kilowatt Hours per month K1MOM Kilowatt Demand per month TDMOM Therms per month	X AN 1/30

**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**

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 4P Affiliation Number Meter Constant (Meter Multiplier) (Ending Reading - Beginning Reading) * Meter Constant = Consumption	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Constant	X AN 1/30

**Segment:** **REF** Reference Identification (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**

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

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification CO Customer Order Number Transformer Loss Multiplier	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Transformer Loss Multiplier	X AN 1/30

**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**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Quantity Qualifier</u>	
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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA01	737	<b>Measurement Reference ID Code</b> 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	<b>O ID 2/2</b>
Must Use	MEA02	738	<b>Measurement Qualifier</b> Code identifying a specific product or process characteristic to which a measurement applies PRQ Product Reportable Quantity	<b>O ID 1/3</b>
Must Use	MEA03	739	<b>Measurement Value</b> The value of the measurement	<b>X R 1/20</b>
	MEA04	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	<b>X</b>
Must Use	C00101	355	<b>Unit or Basis for Measurement Code</b> 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	<b>M ID 2/2</b>
Dep	MEA05	740	<b>Range Minimum</b> 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.	<b>X R 1/20</b>

<b>Must Use</b>	<b>MEA06</b>	<b>741</b>	<b>Range Maximum</b>	<b>X</b>	<b>R 1/20</b>
			The value specifying the maximum of the measurement range		
			Ending reading for the meter or single reading for K1		
<b>Must Use</b>	<b>MEA07</b>	<b>935</b>	<b>Measurement Significance Code</b>	<b>O</b>	<b>ID 2/2</b>
			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  
**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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
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.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
Must Use	PTD01	521	<b>Product Transfer Type Code</b>	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	<b>Reference Identification Qualifier</b>	X ID 2/3
			Code qualifying the Reference Identification	
			Ameren: Required	
			ComEd: Not Used	
			OZ Product Number	
			Commodity	
	PTD05	127	<b>Reference Identification</b>	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

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

DTM~150~20081201

**Data Element Summary**

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

**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**

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

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification JH Tag Meter Role	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> 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.	X AN 1/30

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification AM Adjustment Memo (Charge Back) Adjustment Reason	<b>M ID 2/3</b>
Must Use	REF02	127	<b>Reference Identification</b> 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	<b>X AN 1/30</b>
	REF03	352	<b>Description</b> 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.	<b>O AN 1/80</b>



**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**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	QTY01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity QD Quantity Delivered Whether unmetered services are estimated, calculated or actual, the code will be QD.	M ID 2/2
Must Use	QTY02	380	<b>Quantity</b> Numeric value of quantity Represents quantity of consumption delivered for service period	X R 1/15
Must Use	QTY03	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	O
Must Use	C00101	355	<b>Unit or Basis for Measurement Code</b> 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	M ID 2/2

**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**

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

**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**

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

**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**

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

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

**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**

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

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification MG Meter Number Meter Number	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Number	X AN 1/30

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification KY Site Specific Procedures, Terms, and Conditions Special Meter Configuration	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier 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) VO Community Solar Meter (ComEd) The pseudo meter for Community Solar will always start with a 6. XY Rider VA Gen Meter (ComEd)	X AN 1/30



**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification MT Meter Ticket Number Meter Type	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier 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	X AN 1/30

**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**

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 4P Affiliation Number Meter Constant (Meter Multiplier) (Ending Reading - Beginning Reading) * Meter Constant = Consumption	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Constant	X AN 1/30

**Segment:** **REF** Reference Identification (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**

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

**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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification CO Customer Order Number Transformer Loss Multiplier	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Transformer Loss Multiplier	X AN 1/30

**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**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Quantity Qualifier</u>	
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**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA02	738	<b>Measurement Qualifier</b> Code identifying a specific product or process characteristic to which a measurement applies PRQ Product Reportable Quantity	<b>O ID 1/3</b>
Must Use	MEA03	739	<b>Measurement Value</b> The value of the measurement	<b>X R 1/20</b>
Must Use	MEA04	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use)	<b>X</b>
Must Use	C00101	355	<b>Unit or Basis for Measurement Code</b> 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	<b>M ID 2/2</b>
Must Use	MEA07	935	<b>Measurement Significance Code</b> Code used to benchmark, qualify or further define a measurement value 41 Off Peak 42 On Peak 51 Total	<b>O ID 2/2</b>

**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**

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element Name</b>	
Must Use	DTM01	374 <b>Date/Time Qualifier</b>	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 <b>Date</b>	X DT 8/8
		Date expressed as CCYYMMDD	
Must Use	DTM03	337 <b>Time</b>	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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
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
<p>ST*867*0001            BPT*00*2013-04-19-19.35.43.150000*20130419*DD            DTM*649*20130424*1000            N1*8S*COMMONWEALTH EDISON CO*1*006929509            N1*SJ*Supplier*9*007909111IL00            N1*8R*CUSTOMER NAME              REF*12*1234567890*GROUPB              REF*BLT*LDC              REF*PC*DUAL              REF*9V*Y            PTD*SU              DTM*150*20130321              DTM*151*20130419              REF*NH*R73              REF*LO*28              REF*PTC**SG05            QTY*QD*1291*KH              MEA*AA*PRQ*1291*KH***51              MEA*AA*PRQ*3.56*K1***42              MEA*AA*PRQ*3.56*K1***41            PTD*PL              DTM*150*20130321              DTM*151*20130419              REF*MG*141660000              REF*KY*GS              REF*MT*K1MON              REF*JH*A              REF*4P*000001.0000              REF*IX*5.0            QTY*QD*1291*KH              MEA*AA*PRQ*1291*KH*26963*28254*51              MEA*AA*PRQ*3.56*K1**3.56*51            SE*33*0001</p>	<p>ST*867*0001            BPT*00*1625429453201304190001*20130419*DD            DTM*649*20130425*144500            N1*8S*AMEREN ILLINOIS*1*006936017            N1*SJ*Supplier*9*007909111IL00            N1*8R*CUSTOMER NAME              REF*12*1234567890*GROUPC              REF*LU*41128204              REF*SPL*RATE ZONE III              REF*BLT*LDC              REF*PC*DUAL              REF*9V*Y            PTD*SU              DTM*150*20130319              DTM*151*20130418              REF*NH*DS3*DS - General Service (DS-3) Le              REF*LO*DS3LL-            QTY*QD*24000*KH              MEA*AA*PRQ*24000*KH***51            PTD*PL              DTM*150*20130319              DTM*151*20130418              REF*MG*91346000              REF*MT*K1MON              REF*JH*A              REF*4P*000320.0000              REF*IX*5.0            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            SE*33*0001</p>

**Example #2 – Monthly Usage for Unmetered Service**

ComEd	Ameren
ST*867*0001 BPT*00*2013-10-11-21.51.28.111111*20131011*DD DTM*649*20131016*1000 N1*8S*COMMONWEALTH EDISON CO*1*006929509 N1*SJ*SUPPLIER*9*123456789L00 N1*8R*CUSTOMER NAME REF*12*2863059999*GROUPD REF*BLT*LDC REF*PC*DUAL REF*9V*Y PTD*SU DTM*150*20130911 DTM*151*20131011 REF*NH*R81 REF*LO*35 REF*PTC**SG02 QTY*QD*450*KH MEA*AA*PRQ*450*KH***51 PTD*BC DTM*150*20130911 DTM*151*20131011 QTY*QD*450*KH SE*23*0001	ST*867*0001 BPT*00*9863008816201310110002*20131011*DD N1*8S*AMEREN ILLINOIS*1*006936017 N1*SJ*SUPPLIER*1*111111111 N1*8R*CUSTOMER NAME REF*12*9863009999*GROUPB REF*LU*95749999 REF*SPL*RATE ZONE I REF*BLT*DUAL REF*PC*DUAL REF*9V*N PTD*SU DTM*150*20130911 DTM*151*20131010 REF*NH*DS5*DS - Non-Residential Lighting REF*LO*LITE QTY*QD*95*KH MEA*AA*PRQ*95*KH***51 PTD*BC DTM*150*20130911 DTM*151*20131010 REF*JH*A QTY*QD*95*KH SE*24*0001

### Example #3 – Interval Usage

#### Ameren

ST\*867\*0001  
BPT\*00\*0220130007201010000000\*20101006\*C1  
N1\*8S\*AMEREN ILLINOIS\*1\*006936017  
N1\*SJ\* SUPPLIER\*1\*11111111  
N1\*8R\*CUSTOMER NAME  
REF\*12\*111111111\*NONPOR  
REF\*LU\*01234567  
REF\*SPL\*RATE ZONE I  
REF\*BLT\*DUAL  
REF\*PC\*DUAL  
REF\*9V\*N

#### PTD\*SU

DTM\*150\*20100903  
DTM\*151\*20101005  
REF\*NH\*DS4\*DS - Lg General Svc (DS-4) 100  
REF\*LO\*IDR  
QTY\*QD\*1645893\*KH  
MEA\*\*AA\*PRQ\*1645893\*KH\*\*\*51

#### PTD\*PM (FIRST METER)

DTM\*150\*20100903  
DTM\*151\*20101005  
REF\*MG\*11111111  
REF\*MT\*KH060  
REF\*JH\*A  
REF\*4P\*004800.0000  
QTY\*QD\*354\*KH  
MEA\*\*PRQ\*354\*KH\*\*\*51  
MEA\*\*PRQ\*364\*K1\*\*\*51  
DTM\*582\*20100903\*0200  
QTY\*QD\*318\*KH  
MEA\*\*PRQ\*318\*KH\*\*\*51  
MEA\*\*PRQ\*332\*K1\*\*\*51  
DTM\*582\*20100903\*0300

... skipped through the end of the period for the first meter

QTY\*QD\*225\*KH  
MEA\*\*PRQ\*225\*KH\*\*\*51  
MEA\*\*PRQ\*240\*K1\*\*\*51  
DTM\*582\*20101005\*0100

#### PTD\*PM (SECOND METER)

DTM\*150\*20100903  
DTM\*151\*20101005  
REF\*MG\*22222222  
REF\*MT\*KH060  
REF\*JH\*A  
REF\*4P\*004800.0000  
QTY\*QD\*629\*KH  
MEA\*\*PRQ\*629\*KH\*\*\*51  
MEA\*\*PRQ\*656\*K1\*\*\*51  
DTM\*582\*20100903\*0200

(Continued from left)

QTY\*QD\*596\*KH  
MEA\*\*PRQ\*596\*KH\*\*\*51  
MEA\*\*PRQ\*620\*K1\*\*\*51  
DTM\*582\*20100903\*0300

... skipped through the end of the period for the second meter

QTY\*QD\*726\*KH  
MEA\*\*PRQ\*726\*KH\*\*\*51  
MEA\*\*PRQ\*732\*K1\*\*\*51  
DTM\*582\*20101005\*0100

#### PTD\*PM (THIRD METER)

DTM\*150\*20100903  
DTM\*151\*20101005  
REF\*MG\*33333333  
REF\*MT\*KH060  
REF\*JH\*A  
REF\*4P\*004800.0000  
QTY\*QD\*1308\*KH  
MEA\*\*PRQ\*1308\*KH\*\*\*51  
MEA\*\*PRQ\*1320\*K1\*\*\*51  
DTM\*582\*20100903\*0200  
QTY\*QD\*1276\*KH  
MEA\*\*PRQ\*1276\*KH\*\*\*51  
MEA\*\*PRQ\*1292\*K1\*\*\*51  
DTM\*582\*20100903\*0300

... skipped through the end of the period for the third meter

QTY\*QD\*983\*KH  
MEA\*\*PRQ\*983\*KH\*\*\*51  
MEA\*\*PRQ\*1052\*K1\*\*\*51  
DTM\*582\*20101005\*0100  
SE\*9256\*0001

**Example #4 – Interval Usage**  
**ComEd**

<p>ST*867*80001          BPT*00*8672010-09-910.35.000000*20100909*C1          N1*8S*COMMONWEALTH EDISON*1*006929509          N1*SJ*SUPPLIER*1*111111111          N1*8R*CUSTOMER NAME            REF*12*111111111*NONPOR            REF*BLT*DUAL            REF*PC*DUAL            REF*9V*N</p> <p><b>PTD*SU</b>          DTM*150*20100303          DTM*151*20100401          REF*NH*R78          REF*LO*33          REF*PTC**SG10          QTY*QD*24680670*KH            MEA*AA*PRQ*24680670*KH***51            MEA*AA*PRQ*9189447*KH***42            MEA*AA*PRQ*15491223*KH***41            MEA*AA*PRQ*51275.52*K1***42            MEA*AA*PRQ*50821.34*K1***41</p> <p><b>PTD*PM</b> <b>(FIRST METER)</b>          DTM*150*20100303          DTM*151*20100401          REF*MG*117751111          REF*KY*IO          REF*MT*K1030          REF*JH*A          REF*4P*000001.0000          REF*IX*5.0          QTY*QD*8955*KH            MEA**PRQ*8955*KH***51            MEA**PRQ*17910*K1***51            DTM*582*20100304*0030          QTY*QD*9144*KH            MEA**PRQ*9144*KH***51            MEA**PRQ*18288*K1***51            DTM*582*20100304*0100          ... skipped through the end of the period          QTY*QD*8523*KH            MEA**PRQ*8523*KH***51            MEA**PRQ*17046*K1***51            DTM*582*20100401*2130          QTY*QD*8478*KH            MEA**PRQ*8478*KH***51            MEA**PRQ*16956*K1***51            DTM*582*20100401*2200</p> <p><b>PTD*PM</b> <b>(SECOND METER)</b>          DTM*150*20100303          DTM*151*20100401          REF*MG*145002222</p>	<p>(Continued from left)</p> <p>REF*KY*IO          REF*MT*K1030          REF*JH*A          REF*4P*000001.0000          REF*IX*5.0          QTY*QD*3915*KH            MEA**PRQ*3915*KH***51            MEA**PRQ*7830*K1***51            DTM*582*20100304*0030          QTY*QD*3870*KH            MEA**PRQ*3870*KH***51            MEA**PRQ*7740*K1***51            DTM*582*20100304*0100          ... skipped through the end of the period          QTY*QD*13.284*KH            MEA**PRQ*13.284*KH***51            MEA**PRQ*26.568*K1***51            DTM*582*20100401*2130          QTY*QD*14.256*KH            MEA**PRQ*14.256*KH***51            MEA**PRQ*28.512*K1***51            DTM*582*20100401*2200          SE*33340*80001</p>
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**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 – Community Solar** - Community Solar will always be shown as hourly data. If the metered service on the account is summary data, BPT04 will equal DR to indicate mixed values.

**Ameren Electric**

ST\*867\*0003  
 BPT\*00\*1231231231201806051001\*20180605\*DR  
 N1\*8S\*AMEREN ILLINOIS\*1\*006936017  
 N1\*SJ\*ABC ENERGY\*1\*157912432  
 N1\*8R\*TEST ACCOUNT 8672  
 REF\*12\*1231231231\*GROUPB  
 REF\*LU\*12345678  
 REF\*SPL\*RATE ZONE I  
 REF\*BLT\*DUAL  
 REF\*PC\*DUAL  
 REF\*9V\*N

**PTD\*SU\*\*\*OZ\*EL**

DTM\*150\*20180501  
 DTM\*151\*20180601  
 REF\*NH\*DS2\*DS-2 Small General Delivery Se  
 REF\*LO\*DS2LL-CIPS  
 REF\*AN\*Y  
 QTY\*QD\*2587\*KH  
 MEA\*AA\*PRQ\*2587\*KH\*\*\*51  
 QTY\*77\*11.408\*KH  
 MEA\*AF\*PRQ\*11.408\*KH\*\*\*51  
 QTY\*QH\*154\*KH  
 MEA\*AF\*PRQ\*154\*KH\*\*\*51

- ← Community Solar Participant Ind. = Yes
- ← Total Consumption
- ← Total Off Site (Community Solar) Generation
- ← Starting Bank (Can be on- or off-site)

**PTD\*PL\*\*\*OZ\*EL**

DTM\*150\*20180501  
 DTM\*151\*20180601  
 REF\*MG\*99998888  
 REF\*MT\*KHMON  
 REF\*JH\*A  
 REF\*IX\*6.0  
 QTY\*QD\*2587\*KH  
 MEA\*AA\*PRQ\*2587\*KH\*56407\*58994\*51

**PTD\*PM\*\*\*OZ\*EL**

DTM\*150\*20180502  
 DTM\*151\*20180601  
 REF\*MG\*COMSLR  
 REF\*MT\*KH060  
 REF\*JH\*S  
 QTY\*QD\*.0108\*KH  
 MEA\*\*PRQ\*.0108\*KH\*\*\*51  
 DTM\*582\*20180502\*0100  
 QTY\*QD\*.0104\*KH  
 MEA\*\*PRQ\*.0104\*KH\*\*\*51|  
 DTM\*582\*20180502\*0200|

← Meter # is "COMSLR" for Community Solar

....  
 QTY\*QD\*.0116\*KH|  
 MEA\*\*PRQ\*.0116\*KH\*\*\*51|  
 DTM\*582\*20180601\*2359|  
 SE\*1511\*0003|