# IIInois

# Implementation Guide

For

**Electronic** 

Data

Interchange

Transaction Set
ANSI ASC X12 Version 004010

867

**Monthly Usage** 

Version 2.4

## **Summary of Changes**

January 6, 2009

Initial Release.

October 24, 2009 Version 1.1

- **Change Control** #004 Corrected REF\*CO to indicate that it is only required if value is other than 1.
- Change Control #005 Corrected value CI in BPT04 to C1.
- Change Control #015 Fixed Meter Multiplier to only be required when other than 1. Also, fixed QTY graybox at position 110 which referred to QTY04 (we do not use QTY04).

November 5, 2009 Version 1.2 • Change Control #011 – Added Meter Role (REF\*JH) and Measurement (MEA) segments to allow for adjusted usage in the PTD\*BC Unmetered Services loop.

January 6, 2011 Version 1.3

- Change Control #016 Updated POR Eligibility Group Codes.
- Change Control #018 Removed MEA01 from PTD\*PM loop and corrected examples on segment. Removed old examples from the end of the document and added production examples from Ameren and test examples from ComEd.
- Change Control #021 Changed POR Eligibility Group (REF03 of REF\*12) and Payment Option (REF\*9V) to be optional on Cancel.
- Change Control #022 Added REF\*SPL for Ameren's Rate Zone.
- Corrected X12 values under "Attributes" column and headings of each page.

April 18, 2012 Version 1.4 • Change Control #038 – Added BPT07 code "F" (Final) indicator.

May 31, 2013 Version 2.0 • Change Control #040 – Added requirements for Ameren Gas

October 14, 2013 Version 2.1 • Change Control #041 – Added examples for Ameren Gas and updated electric examples

October 15, 2016 Version 2.2 • Change Control #047 – Added REF03 to the REF\*AM – Adjustment Reason for Ameren to communicate the percentage of accuracy for fast/slow meter usage adjustments to retail gas suppliers.

November 16, 2018 Version 2.3 • Change Control #051 – Added Net Metering Anniversary Month, Community Solar Participant Indicator (REF\*AN), Total Off-site Generation QTY/MEA, Total On-site Generation QTY/MEA, Starting Bank QTY/MEA and new REF\*KY code "VO" for Community Solar. Also added a description of Community Solar to the Implementation Notes.

October 5, 2023 Version 2.4 • Change Control #055 – For ComEd, remove the code "VO" from the REF\*KY segment and remove any information related to ComEd sending a pseudo meter for Community Solar. ComEd will no longer send the pseudo meter as there is no impact to supplier billing.

## **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.
  - O 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.
  - o 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).</li>
  - 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.

Community Solar (Community Supply)

- ComEd operates at an Account Level only.
- 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.
  - Ameren: 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.
  - ComEd: Community Solar has no impact to the supplier; this
    information was previously shown as a pseudo meter, but upon
    implementation of their new billing system, ComEd will stop sending
    the pseudo meter information.
- Ameren Only 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.
  - 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.

One Commodity per Transaction

• Each submitted transaction may be valid for only one commodity (i.e., electric or gas).

# 867 Product Transfer and Resale Report

Functional Group ID= $\mathbf{PT}$ 

### **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:**

	Pos. <u>No.</u>	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BPT	Beginning Segment for Product Transfer and Resale	M	1		
			LOOP ID - N1			5	
	080	N1	Name	О	1		
	120	REF	Reference Identification	О	12		

### **Detail:**

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

### **Summary:**

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

Segment: ST Transaction Set Header

**Position:** 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

**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

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

**BPT** Beginning Segment for Product Transfer and Resale **Segment: 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:** 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. BPT09 is used when it is necessary to reference a Previous Report Number. **Comments: Notes:** Required BPT~00~20081012123456789~20081201~DD BPT~00~20120418123456789~20120418~DD~~~F **Data Element Summary** Ref. Data Des. **Element** Name Attributes **Must Use** BPT01 **Transaction Set Purpose Code** 353 ID 2/2Code 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. Reference Identification AN 1/30 Must Use BPT02 127 Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A unique transaction identification number assigned by the originator of this transaction. This number should be unique over time. Transaction Reference Numbers will only contain uppercase letters (A to Z), digits (0 to 9), dashes (-) and periods (.). Note that all other characters (spaces, underscores, etc.) must be excluded. Must Use BPT03 373 Date M **DT 8/8** Date expressed as CCYYMMDD Transaction Creation Date. This is the date that the transaction was created by the sender's application system. **Must Use** BPT04 755 **Report Type Code** 0 ID 2/2 Code indicating the title or contents of a document, report or supporting item C1 Cost Data Summary Electric: Indicates transaction is an Interval usage transaction with only interval meters on the account. Gas: Not Used DD Distributor Inventory Report Indicates transaction is a non-interval usage transaction. DR **Datalog Report** 

Dep BPT07 306 Action Code O ID 1/2

7

Code indicating type of action

Ameren: Not Used

Gas: Not Used

Electric: Mixed Values - Sent on interval transaction if the account has both interval and non-interval meters. ComEd: When an account finals, the last 867 usage transaction sent to the RES will include an F in the BPT07 element. If the account is dropped due to another RES enrollment or dropped to the utility, an F indicator is not included in the 867 transaction.

F Final

Dep BPT09 127 Reference Identification

O AN 1/30

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

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

 $DTM \ \ Date/Time \ Reference \ (Document \ Due \ Date)$ **Segment:** 

**Position:** 050

Loop:

Level: Heading Usage: Optional

Max Use: 1

**Purpose:** To specify pertinent dates and times

**Syntax Notes:** At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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**

			Data	Element Summary		
Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	<u>Name</u> Date/Time Q	Qualifier	Attr M	ibutes ID 3/3
			Code specify	ing type of date or time, or both date and time		
			649	Document Due		
				The date and time that the RES/GS mustransaction back to the Utility.	t prov	ide the 810
				If a file is received by the Utility after the and the Utility cannot process it, they me RES/GS via 824 transaction.		
Must Use	DTM02	373	Date		X	<b>DT 8/8</b>
			Date expresse	ed as CCYYMMDD		
Must Use	DTM03	337	Time		$\mathbf{X}$	TM 4/8
			HHMMSSD,	ed in 24-hour clock time as follows: HHMM, o or HHMMSSDD, where H = hours (00-23), M econds (00-59) and DD = decimal seconds; deci	= min	nutes (00-59),

expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

HHMM format

 $\textbf{Segment:} \quad N1 \; \textbf{Name} \; (\textbf{Utility})$ 

**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.

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.

N105 and N106 further define the type of entity in N101.

**Notes:** Required

N1~8S~UTILITY NAME~1~123456789

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

 ${\bf Segment:} \qquad {\bf N1} \ \ {\bf Name} \ ({\bf Retail} \ {\bf Electric} \ {\bf Supplier}/{\bf Gas} \ {\bf Supplier})$ 

**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

Must Use	Ref. <u>Des.</u>	Data Element	<u>Name</u>	ent Summary		ibutes
Must Use	N101	98	Entity Identifier Code  Code identifying an organizational entity, a physical location,		M prop	ID 2/3 erty or an
			individual	organizational entity, a physical location,	prop	city of all
			SJ	Service Provider		
				Retail Electric Supplier (RES) or Gas Su	ıpplie	r (GS)
Must Use	N102	93	Name		X	AN 1/60
			Free-form name			
			RES/GS Name			
Must Use	N103	66	<b>Identification Code</b>	e Qualifier	X	ID 1/2
			Code designating the Code (67)	e system/method of code structure used for	or Ide	ntification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with Fou	ır Cha	aracter Suffix
Must Use	N104	67	<b>Identification Code</b>	e	X	AN 9/80
			Code identifying a party or other code			
			RES/GS D-U-N-S o	or D-U-N-S+4 Number		

 $\textbf{Segment:} \quad N1 \ \text{Name (Customer)}$ 

**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.

N105 and N106 further define the type of entity in N101.

**Notes:** Required

N1~8R~CUSTOMER NAME

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

 $REF \ \ Reference \ Identification \ \ (RES/GS \ Account \ Number)$ **Segment:** 

**Position:** 120

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Purpose:** To specify identifying information

**Syntax Notes:** At least one of REF02 or REF03 is required.

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

**Semantic Notes: Comments:** 

**Notes:** 

REF04 contains data relating to the value cited in REF02.

Required if provided on the 814 Enrollment or 814 Change transaction. REF~11~1234567890

			Data Elen	nent Summary		
Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identif	ication Qualifier	Attr M	ibutes ID 2/3
			Code qualifying th	e Reference Identification		
			11	Account Number		
				Retail Electric Supplier (RES) or Gas St Account Number	upplie	er (GS)
Must Use	REF02	127	Reference Identif	ication	X	AN 1/30
				tion as defined for a particular Transaction dentification Qualifier	Set o	r as specified
			RES/GS Account 1	Number		

 $\pmb{REF} \ \ \textbf{Reference Identification (Utility Account Number)}$ **Segment:** 

120 **Position:** 

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Purpose:** 

To specify identifying information

**Syntax Notes:** At least one of REF02 or REF03 is required.

> 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: Comments:**  REF04 contains data relating to the value cited in REF02.

**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 Eleme	ent Summary				
	Ref.	Data						
	Des.	<b>Element</b>	<u>Name</u>			<u>ibutes</u>		
Must Use	REF01	128	Reference Identific	eation Qualifier	M	ID 2/3		
			Code qualifying the	Reference Identification				
			12	Billing Account				
				Utility Account Number				
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30		
			Reference information as defined for a particular Transaction			r as specified		
				entification Qualifier				
_			Utility Account Nur	nber		. = =		
Dep	REF03	352	Description		X	AN 1/80		
			A free-form descript	tion to clarify the related data elements ar	ıd thei	ir content		
			Electric Original Bil					
			Electric Cancel Bill - Optional					
			Gas: Not Used					
			This code indicates the current class of customer in regard to the POR					
			GROUPA	of the time the transaction is sent.				
			GROUPA	POR Eligibility Group A				
				Ameren: Residential POR Eligible According ComEd: Residential	ounts			
			GROUPB	POR Eligibility Group B				
			GROOT B	Ameren: Commercial Mass Market POF	) Elici	:hla		
				Accounts	CEligi	ible		
				ComEd: Commercial Mass Market POR	Elioi	ble		
				Accounts (watt-hour/small)	, Diigi	010		
			GROUPC	POR Eligibility Group C				
				Ameren: Non-Mass Market POR Eligible	le Acc	counts		
				ComEd: Non-Mass Market POR Eligibl				
				(medium)				
			GROUPD	POR Eligibility Group D				
				Ameren: Not Used				
				ComEd: Lighting				
			NONPOR	Account Not Eligible for POR				

**REF** Reference Identification (Service Point Identifier) **Segment:** 

**Position:** 120

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Notes:** 

REF02

127

**Purpose:** To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:** 

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: Comments:** 

**Must Use** 

REF04 contains data relating to the value cited in REF02.

Ameren Mass Market: Required - Monthly Usage sent by Service Point Ameren Non-Mass Market: Required - Monthly Usage sent by Service Point

ComEd: Not Used

Ameren currently uses an 8-digit Service Point Identifier. All 8 digits, including leading

zeros must be provided. REF~LU~00034180

**Data Element Summary** 

Ref. Data Des. **Element** Name **Attributes Must Use** REF01 **Reference Identification Qualifier** 128 ID 2/3 Code qualifying the Reference Identification LU Location Number Service Point Identifier

**Reference Identification** 

AN 1/30 X

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Service Point Identifier

Segment:  $\mathbf{REF}$  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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required

REF~BLT~LDC

**Data Element Summary** 

Ref. Data
Des. Element Name
Must Use REF01 128 Reference Identification Qualifier M ID 2/3

Code qualifying the Reference Identification

BLT Billing Type

Bill Presenter

Must Use REF02 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

DUAL The Utility and RES/GS both Present Bills to the

Customer

ESP RES/GS Presents the Consolidated Bill to the Customer

Used for Illinois "SBO" (Single Bill Option) Only

LDC Utility Presents the Consolidated Bill to the Customer

Used for both Rate Ready and Bill Ready Utility

Consolidated Billing

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

**Position:** 120

> Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Purpose:** To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:** 

> 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: Comments:** 

**Must Use** 

REF04 contains data relating to the value cited in REF02.

**Notes:** Required

REF~PC~DUAL

127

**Data Element Summary** 

Ref. Data Des. **Element Attributes** Name **Must Use** REF01 128 **Reference Identification Qualifier** ID 2/3

Code qualifying the Reference Identification

PC **Production Code** 

Identifies the party that is to calculate their charges for

X

AN 1/30

the bill.

REF02 **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

Segment:  ${f REF}$  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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Electric Original Bill: Required Electric Cancel Bill: Optional

Gas: Not Used REF~9V~Y

### **Data Element Summary**

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		tification Qualifier the Reference Identification	Attr M	ributes ID 2/3
			9V	Payment Category		
				Indicates whether the customer is to b	e part o	of the
				Purchase of Receivables (POR) progra	am.	
Must Use	REF02	127	Reference Iden	tification	X	AN 1/30
			Reference inform	mation as defined for a particular Transaction	on Set o	or as specified

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

N Customer should NOT be signed up for the POR program.
Y Customer should be signed up for the POR program.

Segment:  ${f REF}$  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.

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

**Semantic Notes:** Comments:

**Notes:** 

TELL OF CONTAINS GARA TOTALING TO THE VALUE CITES IN TELL OF

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**

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference	Identification Qualifier	Attr M	ibutes ID 2/3
			Code qualif	Tying the Reference Identification		
			SPL	Standard Point Location Code (SPLC)		
				Rate Zone		
Must Use	REF02	127	Reference 1	Identification	X	AN 1/30

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Rate Zone

**Position:** 010

**Loop:** PTD Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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.

If either PTD04 or PTD05 is present, then the other is required.

**Semantic Notes:** Comments:

omments:

**Notes:** Required

There will only be 1 PTD~SU loop per transaction

PTD~SU

PTD~SU~~~OZ~EL

**Data Element Summary** 

Ref. Data

Des. Element Name

Must Use PTD01 521 Product Transfer Type Code

Attributes

M ID 2/2

Code identifying the type of product transfer

SU Summary

This will be the total of all PM PL and BC Loops.

For Ameren, it will be by service point. For ComEd, it will be by account/rate class.

PTD04 128 Reference Identification Qualifier X ID 2/3

Code qualifying the Reference Identification

Ameren: Required ComEd: Not Used

OZ Product Number

Commodity

PTD05 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Ameren: Required ComEd: Not Used

EL Electric GAS Gas

Segment: DTM Date/Time Reference (Service Period Start)

**Position:** 020

**Loop:** PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 10

**Purpose:** To specify pertinent dates and times

**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** Required

This date reflects the beginning of the date range for this billing period.

DTM~150~20081201

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Tir	ne Qualifier	Attr M	ributes ID 3/3
			Code spe	ecifying type of date or time, or both date and time		
			150	Service Period Start		
Must Use	DTM02	373	Date		X	<b>DT 8/8</b>
			Date exp	ressed as CCYYMMDD		

Segment: DTM Date/Time Reference (Service Period End)

**Position:** 020

**Loop:** PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 10

**Purpose:** To specify pertinent dates and times

**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** Required

This date reflects the ending of the date range for this billing period.

DTM~151~20081230

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Tir	me Qualifier	Attr M	ributes ID 3/3
			Code spe	ecifying type of date or time, or both date and time		
			151	Service Period End		
Must Use	DTM02	373	Date		X	<b>DT 8/8</b>
			Date exp	pressed as CCYYMMDD		

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

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

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required

REF~NH~GS1~Large-GS

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

 $\textbf{Segment:} \quad \textbf{REF} \ \ \textbf{Reference Identification} \ (\textbf{Load Profile})$ 

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required

REF~LO~GS

### **Data Element Summary**

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

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Load Profile

 $\textbf{Segment:} \qquad \textbf{REF} \ \ \textbf{Reference Identification} \ (\textbf{Supply Group})$ 

**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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** 

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

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

	Ref. Des.	Data <u>Element</u>	Name	·	Attr	<u>ributes</u>
Must Use	REF01	128	Reference Identif	ication Qualifier	M	ID 2/3
			Code qualifying th	e Reference Identification		
			PTC	Patent Type		
				Supply Group		
Must Use	REF03	352	Description		X	AN 1/80
			A free-form descri	ption to clarify the related data elements a	nd the	eir content
			Supply Group			

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification} \,\, (\textbf{Community Solar Participant Indicator})$ 

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** 

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

Electric: Required of customer is a participant in Community Solar Gas: Not Used

Gas: Not Use REF~AN~N

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identific	ation Qualifier	Attri	ibutes ID 2/3
			Code qualifying the	Reference Identification		
			AN	Associated Purchase Orders		
				Community Solar Participant Indicator		
Must Use	REF02	127	Reference Identific	ation	X	AN 1/30
			Reference information by the Reference Idea N	Set o	r as specified	
			Y	This customer does not participate in Co for this Service Point (Ameren) Yes	mmu	nity Solar
				This customer participates in Communit Service Point (Ameren)	y Sola	ar for this

Segment: QTY Quantity (Total Consumption)

**Position:** 110

Loop: QTY Optional

Level: Detail
Usage: Optional
Max Use: 1

**Purpose:** To specify quantity information

Doto

**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:** 

Dof

**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

	Ref.	Data						
N T.	Des.	<b>Element</b>	Name			ibutes ID-2/2		
Must Use	QTY01	673	<b>Quantity Qualifier</b>		M	ID 2/2		
			Code specifying the	type of quantity				
			KA	Estimated				
				Used when Quantity in QTY02 is Estimate	ated			
			QD	Quantity Delivered				
				Used when Quantity in QTY02 is Actua	l Rea	ding		
Must Use	QTY02	380	Quantity		X	R 1/15		
			Numeric value of qu	antity				
			Represents quantity	of consumption delivered for service peri	od			
Must Use QTY03 C001		C001	<b>Composite Unit of</b>	Measure	O			
			To identify a composite unit of measure (See Figures Appendix for of use)					
Must Use	C00101	355	Unit or Basis for M	leasurement Code	M	ID 2/2		
			Code specifying the which a measurement K1	units in which a value is being expressed nt has been taken  Kilowatt Demand	, or m	nanner in		
			KI	KW				
			К3	Kilovolt Amperes Reactive Hour				
			110	KVARH				
			KH	Kilowatt Hour				
				KWH				
			TD	Therms				

 $MEA \ \ \text{Measurements (Readings)}$ **Segment:** 

**Position:** 160

> QTY Loop: 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:** At least one of MEA03 MEA05 MEA06 or MEA08 is required.

> If MEA05 is present, then MEA04 is required. 3 If MEA06 is present, then MEA04 is required.

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:** 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.	Data	<b>3.7</b>			•••		
Must Use	<u>Des.</u> MEA01	<u>Element</u> 737	Name Measurement Refe	aranca ID Coda	Attr O	<u>ibutes</u> ID 2/2		
Must Osc	WILAUI	757		e broad category to which a measurement	O			
			AA	Meter reading-beginning actual/ending				
			AE	Meter reading-beginning actual/ending				
			AF	Actual Total	Comm			
			EA	Meter reading-beginning estimated/end	ing ac	tual		
			EE	Meter reading-beginning estimated/end	_			
Must Use	MEA02	738	Measurement Qua		O	ID 1/3		
1.14.50 0.50	1,12114	, 50		specific product or process characteristic	to whi			
			measurement applie					
			PRQ	Product Reportable Quantity				
Must Use	MEA03	739	Measurement Valu	ıe	X	R 1/20		
			The value of the me	The value of the measurement				
	MEA04	C001	Composite Unit of Measure X					
			To identify a composition of use)	osite unit of measure (See Figures Appen	dix fo	or examples		
Must Use	C00101	355	Unit or Basis for M	Ieasurement Code	M	ID 2/2		
				units in which a value is being expressed	l, or n	nanner in		
			which a measureme					
			K1	Kilowatt Demand				
			17.2	KW				
			K3	Kilovolt Amperes Reactive Hour KVARH				
			KH	Kilowatt Hour				
			КΠ	KWH				
			TD	Therms				
Must Use	MEA07	935	Measurement Sign	=	O	ID 2/2		
Widst Osc	WIENV	755	_	mark, qualify or further define a measure	_			
			41	Off Peak	1110111	varac		
			42	On Peak				
			51	Total				
			J.1	101111				

 $\textbf{Segment:} \qquad \textbf{QTY} \ \ \textbf{Quantity} \ (\textbf{Total On-Site Generation})$ 

**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.

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

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	<u>Name</u> Quantity Qualifier	·	Attr M	ibutes ID 2/2
			Code specifying the	type of quantity		
			87	Quantity Received		
				Total On-Site Generation (Actual)		
			9H	Estimated Duration		
				Total On-Site Generation (Estimated)		
Must Use	QTY02	380	Quantity		M	R 1/15
			Numeric value of qu			
			Represents the total	on-site measured generation.		
Must Use	QTY03	C001	<b>Composite Unit of</b>	Measure	M	
			To identify a compo of use)	site unit of measure (See Figures Append	dix fo	r examples
Dep	C00101	355	Unit or Basis for M	leasurement Code	O	ID 2/2
			Code specifying the which a measurement KH	units in which a value is being expressed nt has been taken Kilowatt Hour	, or m	nanner in

Segment: MEA Measurements

**Position:** 160

Loop: QTY Optional

Level: Detail

**Usage:** Optional (Dependent)

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

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

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

negative (-) value and MEA06 as the positive (+) value.

**Notes:** Ameren: Required when service point has on-site generation.

ComEd: Not Used QTY\*87\*300\*KH

MEA\*AF\*PRQ\*300\*KH\*\*\*51

	Ref.	Data	•			
	Des.	<b>Element</b>	Name	Attr	<u>ributes</u>	
Must Use	MEA01	737	Measurement Reference ID Code	M	ID 2/2	
			Code identifying the broad category to which a measurement	appli	es	
			AF Actual Total			
Must Use	MEA02	738	Measurement Qualifier	M	ID 1/3	
			Code identifying a specific product or process characteristic measurement applies	to wh	ich a	
			PRQ Product Reportable Quantity			
Must Use	MEA03	739	Measurement Value		R 1/20	
			The value of the measurement			
			Represents quantity of on-site generation received for service	od.		
	MEA04	C001	Composite Unit of Measure	X		
			To identify a composite unit of measure (See Figures Appendicuse)	dix fo	or examples	
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 which a measurement has been taken  KH  Kilowatt Hour	d, or n	nanner in	
Must Use	<b>MEA07</b>	935	Measurement Significance Code	M	ID 2/2	
			Code used to benchmark, qualify or further define a measurement value			
			51 Total			

**Segment:** 

**Position:** 110

> Loop: QTY Optional

Level: Detail Usage: Optional Max Use: 1

**Purpose:** 

To specify quantity information

At least one of QTY02 or QTY04 is required. **Syntax Notes:** Only one of QTY02 or QTY04 may be present.

QTY04 is used when the quantity is non-numeric.

**Semantic Notes: 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

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	<u>Name</u> Quantity Qualifier	•	Attr M	ibutes ID 2/2	
			Code specifying the	type of quantity			
			77	Stock Transfers In			
				Off-Site Generation (Community Solar)			
Must Use	QTY02	380	Quantity		M	R 1/15	
			Numeric value of qu	ıantity			
			Represents the total off-site generation (e.g., Community Solar).				
Must Use	QTY03	C001	<b>Composite Unit of</b>	Measure	M		
			osite unit of measure (See Figures Append	dix fo	r examples		
Must Use	C00101	355	Unit or Basis for M	Ieasurement Code	M	ID 2/2	
			Code specifying the which a measurement KH	units in which a value is being expressed nt has been taken Kilowatt Hour	, or m	nanner in	

Segment: MEA Measurements

**Position:** 160

Loop: QTY Optional

Level: Detail

**Usage:** Optional (Dependent)

Max Use: 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

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

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

negative (-) value and MEA06 as the positive (+) value.

**Notes:** Ameren: Required when customer has off-site generation such as Community Solar.

ComEd: Not Used QTY\*77\*100\*KH

MEA\*AF\*PRQ\*100\*KH\*\*\*51

	Ref.	Data		•		5 <b>.</b> .
Must Use	<u>Des.</u> MEA01	<u>Element</u> 737	Name Measurement Ref	erence ID Code	Attr M	ibutes ID 2/2
Widst Osc	MILAUI	131	Measurement Reference ID Code			
			Code identifying the broad category to which a measurement applies			
			AF	Actual Total		
Must Use	MEA02	738	Measurement Qu	alifier	M	ID 1/3
			Code identifying a measurement applied PRQ	specific product or process characteristic t es Product Reportable Quantity	o whi	ch a
Must Use	MEA03	739	Measurement Val	ue	M	R 1/20
			The value of the m	easurement		
			Represents quantity service period.	Solar)	received for	
	MEA04	C001	Composite Unit of Measure		$\mathbf{X}$	
			To identify a composite unit of measure (See Figures Appendix for ex of use)			
Must Use	C00101	355	Unit or Basis for l	Measurement Code	M	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken  KH Kilowatt Hour			
Must Use	<b>MEA07</b>	935	Measurement Sig	nificance Code	M	ID 2/2
			Code used to benchmark, qualify or further define a measurement value			
			51	Total		

 $\textbf{Segment:} \quad QTY \; \textit{Quantity} \; (\textbf{Starting Bank})$ 

**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.

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

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	Name Quantity Qualifier	·	Attri M	ibutes ID 2/2
			Code specifying the type of quantity			
			QH	Quantity on Hold		
				Starting Bank		
Must Use	QTY02	380	Quantity		M	R 1/15
			Numeric value of quantity			
			Represents the kWh including both on an	that were banked from prior month's exc d off-site.	ess ge	eneration
Must Use	QTY03	C001	<b>Composite Unit of </b>	Measure	M	
			of use)	site unit of measure (See Figures Append	dix fo	-
Must Use	C00101	355	Unit or Basis for M	easurement Code	M	ID 2/2
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken  KH  Kilowatt Hour				

Segment: MEA Measurements

**Position:** 160

Loop: QTY Optional

Level: Detail

**Usage:** Optional (Dependent)

Max Use: 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:** 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.

2 If MEA05 is present, then MEA04 is required.3 If MEA06 is present, then MEA04 is required.

4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.

5 Only one of MEA08 or MEA03 may be present.

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

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

negative (-) value and MEA06 as the positive (+) value.

**Notes:** Ameren: Required when service point has a Starting Bank.

ComEd: Not Used QTY\*QH\*500\*KH

MEA\*AF\*PRQ\*500\*KH\*\*\*51

Must Use	Ref. <u>Des.</u> MEA01	Data Element 737	Name Magazzament Reference ID Co	·	ributes ID 2/2
Must Use	MEAUI	131	Measurement Reference ID Code		
			Code identifying the broad category to which a measurement applies		
			AF Actual Tota	1	
Must Use	MEA02	738	Measurement Qualifier		ID 1/3
			Code identifying a specific produmeasurement applies PRQ Product Rep	act or process characteristic to who	ich a
Must Use	MEA03	739	Measurement Value	M	R 1/20
			The value of the measurement		
			Represents the kWh that were banked from prior month's excess generation including both on and off-site.		
	MEA04	C001	<b>Composite Unit of Measure</b>	X	
			To identify a composite unit of measure (See Figures Appendix for example of use)		
Must Use	C00101	355	<b>Unit or Basis for Measurement</b>	Code M	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken  KH  Kilowatt Hour		
Must Use	<b>MEA07</b>	935	35 Measurement Significance Code		ID 2/2
			Code used to benchmark, qualify or further define a measurement value		
			51 Total		

Segment: PTD Product Transfer and Resale Detail (Non-Interval Metered Services

Detail)

**Position:** 010

Loop: PTD Mandatory

Level: Detail Usage: Mandatory

Max Use: 1

**Purpose:** To indicate the start of detail information relating to the transfer/resale of a product and

provide identifying data

**Syntax Notes:** 1 If either PTD02 or PTD03 is present, then the other is required.

2 If either PTD04 or PTD05 is present, then the other is required.

**Semantic Notes:** 

**Comments:** 

**Notes:** PTD Loops may be sent in any order.

Required if this is a non-interval metered account.

Note: The sending of the PL loop is optional when this is a cancel transaction

(BPT01=01). PTD~PL

PTD~PL~~~OZ~EL

**Data Element Summary** 

Ref. Data

Des. Element Name

Must Use PTD01 521 Product Transfer Type Code

Attributes

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

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

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** 

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

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

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

Segment: DTM Date/Time Reference (Service Period End)

**Position:** 020

**Loop:** PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 10

**Purpose:** To specify pertinent dates and times

**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** Required

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

DTM~151~20081231

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Ti	me Qualifier	Attr M	ibutes ID 3/3
			Code sp	ecifying type of date or time, or both date and time		
			151	Service Period End		
Must Use	<b>DTM02</b>	373	Date		X	<b>DT 8/8</b>
			Date exp	pressed as CCYYMMDD		

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** 

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

Required if there is a metered account/service point and the meter is active during the service period.

REF~MG~12345

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Reference Iden	tification Qualifier	Attı M	ributes ID 2/3
			Code qualifying	the Reference Identification		
			MG	Meter Number		
				Meter Number		
Must Use	REF02	127	Reference Iden	tification	X	AN 1/30
				nation as defined for a particular Transaction Eldentification Qualifier	on Set o	or as specified

**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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

Notes: Electric: Optional

Gas: Not Used REF~KY~BMG

#### **Data Element Summary**

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identific	ration Qualifier	Attı M	ributes ID 2/3
			Code qualifying the	Reference Identification		
			KY	Site Specific Procedures, Terms, and C	Condition	ons
				Special Meter Configuration		
Must Use	REF02	127	Reference Identific	ration	X	AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Special Meter Configuration

AL	Auxiliary Load (ComED)
BMG	Behind the Meter Generation (Ameren)
CM	Check Meter (ComEd)
CO	Check Meter/Outflow (ComEd)
GM	Generator Meter (ComEd)
GO	Generated Out Meter (ComEd)
GS	General Service (ComEd)
IC	Inflow/Check Meter (ComEd)
IF	In With Flow Through (ComEd)
IO	In/Out Meter Flow Through (ComEd)
IW	In/Out Without Flow Through (ComEd)
KQ	KQ Only (ComEd)
NM-BI	Net Metering - Bidirectional Meter (Ameren)
NM-GG	Net Metering - Gross Generation Meter (Ameren)
NM-GL	Net Metering - Gross Load Meter (Ameren)
OF	Out with Flow Through (ComEd)
OW	Out without Flow Through (ComEd)
PG	Power Factor General Service (ComEd)
PS	Power Factor Space Heat (ComEd)
SH	Space Heating (ComEd)
XY	Rider VA Gen Meter (ComEd)

Segment: REF Reference Identification (Meter Type)

**Position:** 030

Loop: PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 20

**Purpose:** To specify identifying information

**Syntax Notes:** 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.

Comments:

**Notes:** Required

REF~MT~KHMON

#### **Data Element Summary**

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identif	fication Qualifier	Attr M	ibutes ID 2/3
			Code qualifying th	ne Reference Identification		
			MT	Meter Ticket Number		
				Meter Type		
<b>Must Use</b>	REF02	127	Reference Identif	fication	X	AN 1/30

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

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

Type of Consumption

K1 Kilowatt Demand (kW)

K3 Kilovolt Amperes Reactive Hour (kVARH)

KH Kilowatt Hour (kWh)

TD Therms

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

Metering Interval Reported for Billing Purposes

MON Month

For Example:

KHMON Kilowatt Hours per month K1MON Kilowatt Demand per month

TDMON Therms per month

 ${f REF}$  Reference Identification (Meter Role) **Segment:** 

**Position:** 030

> Loop: PTD Mandatory

Level: Detail Usage: Optional Max Use: 20

**Purpose:** To specify identifying information

**Syntax Notes:** At least one of REF02 or REF03 is required.

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

**Semantic Notes: Comments:**  REF04 contains data relating to the value cited in REF02.

**Notes:** Required REF~JH~A

**Data Element Summary** 

			Dutu Lien	ioni Summing		
Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identifi	ication Qualifier	Attı M	ributes ID 2/3
			Code qualifying th	e Reference Identification		
			JH	Tag		
				Meter Role		
Must Use	REF02	127	Reference Identifi	ication	X	AN 1/30
				tion as defined for a particular Transactio dentification Qualifier	n Set o	or as specified
			Meter Role			

Meter Role

Additive - this consumption contributed to the Α 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:  $\mathbf{REF}$  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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required when the value is other than 1.

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

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

#### **Data Element Summary**

	Ref. Des.	Data Element	Name		Attr	ibutes
Must Use	REF01	128	Reference Identification Qua	alifier	M	ID 2/3
			Code qualifying the Reference	e Identification		
			4P Affiliation	on Number		
			Meter Co	onstant (Meter Multiplier)		
			(Ending	Reading - Beginning Reading)	* Met	er
			Constant	t = Consumption		
Must Use	REF02	127	<b>Reference Identification</b>		$\mathbf{X}$	AN 1/30

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Meter Constant

Segment:  ${f REF}$  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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

**Must Use** 

REF02

127

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

Notes: Required

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

of the decimal and Y is the number of dials to the right.

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

**Data Element Summary** 

Ref. Data
Des. Element Name

Must Use REF01 128 Reference Identification Qualifier

Code qualifying the Reference Identification
IX Item Number

Number of Dials

Reference information as defined for a particular Transaction Set or as specified

X

AN 1/3

by the Reference Identification Qualifier

Number of Dials

**Reference Identification** 

 $\textbf{Segment:} \quad \textbf{REF} \ \ \textbf{Reference Identification} \ (\textbf{Transformer Loss Multiplier})$ 

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** 

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

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

	Ref. Des.	Data Element	Name	•	Attr	ibutes
Must Use	REF01	128	Reference Identific	ation Qualifier	M	ID 2/3
			Code qualifying the	Reference Identification		
			CO	Customer Order Number		
				Transformer Loss Multiplier		
Must Use	REF02	127	Reference Identific	ation	X	AN 1/30
				on as defined for a particular Transaction entification Qualifier	Set o	or as specified
			Transformer Loss M	Iultiplier		

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

	Ref.	Data				
	Des.	<b>Element</b>	<u>Name</u>			<u>ibutes</u>
Must Use	QTY01	673	<b>Quantity Qualifier</b>		M	ID 2/2
			Code specifying the	type of quantity		
			KA	Estimated		
				Used when Quantity in QTY02 is Estim	ated	
			QD	Quantity Delivered		
				Used when Quantity in QTY02 is Actua	l Rea	ding
Must Use	QTY02	380	Quantity		X	R 1/15
			Numeric value of qu	uantity		
			Represents quantity	of consumption delivered for service period	iod.	
Must Use	QTY03	C001	<b>Composite Unit of</b>	Measure	O	
			To identify a composition of use)	osite unit of measure (See Figures Append	dix fo	or examples
Must Use	C00101	355	Unit or Basis for M	<b>Ieasurement Code</b>	$\mathbf{M}$	ID 2/2
			Code specifying the which a measureme	units in which a value is being expressed nt has been taken	, or n	nanner in
			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

	D. C	<b>D</b> 4	Data Eleme	ent Summary			
	Ref. Des.	Data Element	Name		Attr	ibutes	
Must Use	<u>Des.</u> MEA01	737	Measurement Refe	rence ID Code	0	ID 2/2	
1.14.50 0.50	1,121101			ode identifying the broad category to which a measurement applied			
			AA	Meter reading-beginning actual/ending a			
			AE	Meter reading-beginning actual/ending e			
			AF	Actual Total			
			EA	Meter reading-beginning estimated/endi	ng act	tual	
			EE	Meter reading-beginning estimated/endi	_		
Must Use	MEA02	738	Measurement Qual		o	ID 1/3	
			Code identifying a s	pecific product or process characteristic to	o whi	ch a	
			measurement applies				
N.F. 4 TT	N 652 4 62	<b>=</b> 20	PRQ	Product Reportable Quantity	<b>T</b> 7	D 1/00	
Must Use	MEA03	739	Measurement Valu		X	R 1/20	
	MEAGA	C001	The value of the mea		<b>X</b> 7		
	MEA04	C001	Composite Unit of		X	,	
			of use)	site unit of measure (See Figures Append	11X TO	r examples	
Must Use	C00101	355	Unit or Basis for M	leasurement Code	M	ID 2/2	
				units in which a value is being expressed	or m	nanner in	
			which a measuremen				
			K1	Kilowatt Demand			
			К3	KW Kilayalt Amnaras Pasatiya Hayr			
			K3	Kilovolt Amperes Reactive Hour KVARH			
			KH	Kilowatt Hour			
			KII	KWH			
			TD	Therms			
Dep	MEA05	740	Range Minimum	Therms	X	R 1/20	
DUP	1,12,100	, 10	-	g the minimum of the measurement range		11 1/20	
			Beginning Read	,			
			•	r provides beginning reads and is measur	ing K	WH.	
			Not used on K1 (der	nand) reads.			

Must Use	MEA06	741	Range Maxin	num	X	R 1/20		
			The value spe	The value specifying the maximum of the measurement range				
			Ending reading for the meter or single reading for K1					
Must Use	<b>MEA07</b>	935	Measuremen	t Significance Code	0	ID 2/2		
			Code used to l	Code used to benchmark, qualify or further define a measurement				
			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

Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Code identifying a sp	Name Measurement Qualifier Code identifying a specific product or process characteristic t measurement applies			
			CF	Capacitance Out Therm Factor			
Must Use	MEA03	739	Measurement Value	e	M	R 1/20	
			The value of the mea				
			Therm Factor				

Segment: PTD Product Transfer and Resale Detail (Unmetered Services Summary)

**Position:** 010

Loop: PTD Mandatory

Level: Detail
Usage: Mandatory

Max Use:

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.

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

			Duta Elem	ent Summary					
Must Use	Ref. <u>Des.</u> PTD01	Data Element 521	<u>Name</u> Product Transfer	Гуре Code	Attr M	ibutes ID 2/2			
			Code identifying the type of product transfer						
			BC	Issue - Other Agency					
				A BC loop will be sent for unmetered se adjustments on the account/service poin		s or			
	PTD04	128	Reference Identific	Reference Identification Qualifier					
			Code qualifying the Reference Identification						
			Ameren: Required ComEd: Not Used						
			OZ	Product Number					
				Commodity					
	PTD05	127	Reference Identific	cation	X	AN 1/30			
				Reference information as defined for a particular Transaction Set by the Reference Identification Qualifier					
			Ameren: Required						
			ComEd: Not Used						
			EL	Electric					
			GAS	Gas					

**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

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Tin	ne Qualifier	Attr M	ributes ID 3/3
			•	cifying type of date or time, or both date and time		
			150	Service Period Start		
Must Use	DTM02	373	Date		$\mathbf{X}$	<b>DT 8/8</b>
			Date exp	ressed as CCYYMMDD		

**Position:** 020

**Loop:** PTD Mandatory

Required

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:

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

DTM~151~20081231

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Tir	ne Qualifier	Attr M	ributes ID 3/3
			Code spe	ecifying type of date or time, or both date and time		
			151	Service Period End		
Must Use	DTM02	373	Date		$\mathbf{X}$	<b>DT 8/8</b>
			Date exp	ressed as CCYYMMDD		

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification} \, (\textbf{Meter Role})$ 

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

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 Eleme	ent Summary			
	Ref.	Data					
	Des.	<u>Element</u>	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>	
Must Use	REF01	128	Reference Identific	eation Qualifier	M	ID $2/3$	
			Code qualifying the	Reference Identification			
			JH	Tag			
				Meter Role			
Must Use	REF02	127	Reference Identific	cation	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 summarized total (do nothing).	to the	е	
			I	Ignore - this consumption did not contri summarized total (do nothing).	bute t	o the	
			S	Subtractive - this consumption needs to the summarized total.	be su	btracted from	

**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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required if there is adjusted usage

REF~AM~02

REF~AM~01~102.345

#### **Data Element Summary**

	Ref.	Data	Dutu Lici	iiciit Suiiiiidi y		
	Des.	Element	Name		Attr	<u>ributes</u>
Must Use	REF01	128	Reference Identif	ication Qualifier	M	ID 2/3
			Code qualifying th	ne Reference Identification		
			AM	Adjustment Memo (Charge Back)		
				Adjustment Reason		
Must Use	REF02	127	Reference Identif	ication	X	AN 1/30
				tion as defined for a particular Transactior dentification Qualifier	Set o	or as specified
			Adjustment Reaso	n		
			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		
	REF03	352	Description		O	AN 1/80

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

Electric: Not Used

Gas: Additional information regarding the adjustment. For example, Ameren

may provide the percent of the adjustment.

**QTY** Quantity **Segment:** 

**Position:** 110

> Loop: QTY Optional

Level: Detail Usage: Optional Max Use: 1

**Purpose:** 

To specify quantity information

**Syntax Notes:** At least one of QTY02 or QTY04 is required. Only one of QTY02 or QTY04 may be present.

QTY04 is used when the quantity is non-numeric.

**Semantic Notes: 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

	Ref.	Data						
	Des.	<b>Element</b>	<u>Name</u>		<u>Attr</u>	<u>ibutes</u>		
Must Use	QTY01	673	<b>Quantity Qualifier</b>		M	ID 2/2		
			Code specifying the	type of quantity				
			QD	Quantity Delivered				
				Whether unmetered services are estimate actual, the code will be QD.	ed, ca	lculated or		
Must Use	QTY02	380	Quantity		X	R 1/15		
			Numeric value of quantity					
			Represents quantity	of consumption delivered for service period	iod			
Must Use	QTY03	C001	<b>Composite Unit of</b>	Measure	O			
			To identify a comport of use)	osite unit of measure (See Figures Append	dix fo	or examples		
Must Use	C00101	355	Unit or Basis for M	Ieasurement Code	M	ID 2/2		
			Code specifying the which a measurement	units in which a value is being expressed nt has been taken	, or m	nanner in		
			KH	Kilowatt Hour				
				KWH				
			TD	Therms				

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

	Ref.	Data	<b>N</b> I	·	A 44-	.94	
Must Use	<u>Des.</u> MEA01	<u>Element</u> 737	Name Measurement Re	afaranca ID Coda	Attr M	r <u>ibutes</u> ID 2/2	
Must Use	MILAUI	131					
				the broad category to which a measurement	. appıı	es	
			AF	Actual Total			
Must Use	MEA02	738	Measurement Qu		X	ID 1/3	
				a specific product or process characteristic	to wh	ich a	
			measurement app				
			PRQ	Product Reportable Quantity			
Must Use	MEA03	739	Measurement Va	<del></del>	X	R 1/20	
			The value of the r	neasurement			
Must Use	MEA04	C001	Composite Unit	of Measure	X		
			To identify a com of use)	o identify a composite unit of measure (See Figures Appendix for exam			
Must Use	C00101	355	Unit or Basis for	<b>Measurement Code</b>	M	ID 2/2	
			Code specifying to	he units in which a value is being expressed	l, or n	nanner in	
				nent has been taken			
			K1	Kilowatt Demand			
			KH	Kilowatt Hour			
			TD	Therms			
Must Use	<b>MEA07</b>	935	Measurement Sig	gnificance Code	O	ID 2/2	
			Code used to bend	chmark, qualify or further define a measure	ment	value	
			41	Off Peak			
			42	On Peak			
			51	Total			

PTD Product Transfer and Resale Detail (Interval Metered Services Detail) **Segment:** 

**Position:** 010

> PTD Loop: Mandatory

Level: Detail Usage: Mandatory

Max Use:

**Purpose:** To indicate the start of detail information relating to the transfer/resale of a product and

provide identifying data

**Syntax Notes:** If either PTD02 or PTD03 is present, then the other is required.

If either PTD04 or PTD05 is present, then the other is required.

**Semantic Notes: Comments:** 

> **Notes:** PTD Loops may be sent in any order.

> > Required if this is an interval metered account.

Note: The sending of the PM loop is optional when this is a cancel transaction

(BPT01=01). PTD~PM

**Data Element Summary** 

Ref. Data Des. Element Name **Attributes Must Use** PTD01 **Product Transfer Type Code** 521 M ID 2/2 Code identifying the type of product transfer PM Physical Meter Information A PM loop will be provided for each interval meter. PTD04 128 **Reference Identification Qualifier** X ID 2/3Code qualifying the Reference Identification Ameren: Required ComEd: Not Used Product Number ΟZ 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

**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

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time	Qualifier	Attr M	ributes ID 3/3
			Code specify	ying 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 express	sed 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

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

Segment: DTM Date/Time Reference (Service Period End)

**Position:** 020

**Loop:** PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 10

**Purpose:** To specify pertinent dates and times

**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** Required

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

DTM~151~20081231

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	Name Date/T	ime Qualifier	Attr M	ibutes ID 3/3
			Code sp	pecifying type of date or time, or both date and time		
			151	Service Period End		
Must Use	DTM02	373	Date		$\mathbf{X}$	<b>DT 8/8</b>
			Date ex	pressed as CCYYMMDD		

**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.

If either C04003 or C04004 is present, then the other is required.
If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

**Notes:** 

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

Required if there is a metered account/service point and the meter is active during the service period.

REF~MG~12345

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

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required

REF~KY~AL

# **Data Element Summary**

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identifi	cation Qualifier	Attr M	ributes ID 2/3
			Code qualifying the	e Reference Identification		
			KY	Site Specific Procedures, Terms, and Co	onditio	ons
				Special Meter Configuration		
Must Use	REF02	127	Reference Identifi	cation	X	AN 1/30

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

Special Meter Configuration

J	peciai Meter Comi	guiation
	AL	Auxiliary Load (ComED)
	BMG	Behind the Meter Generation (Ameren)
	CM	Check Meter (ComEd)
	CO	Check Meter/Outflow (ComEd)
	GM	Generator Meter (ComEd)
	GO	Generated Out Meter (ComEd)
	GS	General Service (ComEd)
	IC	Inflow/Check Meter (ComEd)
	IF	In With Flow Through (ComEd)
	IO	In/Out Meter Flow Through (ComEd)
	IW	In/Out Without Flow Through (ComEd)
	KQ	KQ Only (ComEd)
	NM-BI	Net Metering - Bidirectional Meter (Ameren)
	NM-GG	Net Metering - Gross Generation Meter (Ameren)
	NM-GL	Net Metering - Gross Load Meter (Ameren)
	OF	Out with Flow Through (ComEd)
	OW	Out without Flow Through (ComEd)
	PG	Power Factor General Service (ComEd)
	PS	Power Factor Space Heat (ComEd)
	SH	Space Heating (ComEd)
	XY	Rider VA Gen Meter (ComEd)

Segment: REF Reference Identification (Meter Type)

**Position:** 030

Loop: PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 20

**Purpose:** To specify identifying information

**Syntax Notes:** 1 At least one of REF02 or REF03 is required.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:** Comments:

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

**Notes:** Required

REF~MT~K1060

#### **Data Element Summary**

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Identit	fication Qualifier	Attr M	ibutes ID 2/3
			Code qualifying th	he Reference Identification		
			MT	Meter Ticket Number		
				Meter Type		
<b>Must Use</b>	REF02	127	Reference Identif	fication	X	AN 1/30

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

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

Type of Consumption

K1 Kilowatt Demand (kW)

K3 Kilovolt Amperes Reactive Hour (kVARH)

KH Kilowatt Hour (kWh)

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

Metering Interval Reported for Billing Purposes

nnn Number of minutes from 001 to 999

015 15 minute interval

060 60 minute interval

For Example:

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

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

**Position:** 030

> PTD Loop: Mandatory

Level: Detail Usage: Optional Max Use: 20

**Purpose:** To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:** 

> 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: Comments:**  REF04 contains data relating to the value cited in REF02.

**Notes:** Required

REF~JH~A

**Data Element Summary** 

Ref. Data Des. **Element Attributes** Name **Must Use** REF01 128 **Reference Identification Qualifier** ID 2/3 Code qualifying the Reference Identification JΗ Tag

Meter Role **Must Use** REF02 127 **Reference Identification** 

AN 1/30 X

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:  ${f REF}$  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.

If either C04003 or C04004 is present, then the other is required.
 If either C04005 or C04006 is present, then the other is required.

Semantic Notes: 1

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

Comments: Notes:

Required when the value is other than 1.

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

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

#### **Data Element Summary**

	Ref.	Data				
	Des.	<b>Element</b>	Name		Attr	<u>ibutes</u>
Must Use	REF01	128	Reference Identific	cation Qualifier	M	ID 2/3
			Code qualifying the	Reference Identification		
			4P	Affiliation Number		
				Meter Constant (Meter Multiplier)		
				(Ending Reading - Beginning Reading)	* Met	ter
				Constant = Consumption		
Must Use	REF02	127	Reference Identific	eation	$\mathbf{X}$	AN 1/30

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Meter Constant

**REF** Reference Identification (Number of Dials) **Segment:** 

**Position:** 030

> PTD Loop: Mandatory

Level: Detail Usage: Optional Max Use: 20

**Purpose:** To specify identifying information

At least one of REF02 or REF03 is required. **Syntax Notes:** 

> 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: Comments:**  REF04 contains data relating to the value cited in REF02.

**Notes:** Required

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

of the decimal and Y is the number of dials to the right.

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

**Data Element Summary** 

Ref. Data Des. **Element Name Attributes Must Use** REF01 **Reference Identification Qualifier** 128 ID 2/3Code qualifying the Reference Identification IX Item Number Number of Dials **Must Use** REF02 127 **Reference Identification** X

Reference information as defined for a particular Transaction Set or as specified

by the Reference Identification Qualifier

Number of Dials

AN 1/3

 ${f REF}$  Reference Identification (Transformer Loss Multiplier) **Segment:** 

**Position:** 030

> Loop: PTD Mandatory

Level: Detail Usage: Optional Max Use: 20

**Purpose:** To specify identifying information

**Syntax Notes:** At least one of REF02 or REF03 is required.

> If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required. 3

**Semantic Notes: Comments:**  REF04 contains data relating to the value cited in REF02.

**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**

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		fication Qualifier he Reference Identification	Attı M	ributes ID 2/3
			CO CO	Customer Order Number Transformer Loss Multiplier		
Must Use	REF02	127	Reference Identi		X on Set o	AN 1/30 or as specified

by the Reference Identification Qualifier

Transformer Loss Multiplier

Segment: QTY Quantity

**Position:** 110

**Loop:** QTY Optional

Level: Detail
Usage: Optional
Max Use: 1

**Purpose:** To specify quantity information

**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.

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

	Ref.	Data				
	Des.	<b>Element</b>	<u>Name</u>		Attri	<u>ibutes</u>
Must Use	QTY01	673	<b>Quantity Qualifier</b>		M	ID 2/2
			Code specifying the	type of quantity		
			KA	Estimated		
				Used when Quantity in QTY02 is Estima	ated	
			QD	Quantity Delivered		
				Used when Quantity in QTY02 is Actual	Read	ding
Must Use	QTY02	380	Quantity		X	R 1/15
			Numeric value of qu	antity		
			Represents quantity	of consumption delivered for service peri	od.	
Must Use	QTY03	C001	<b>Composite Unit of </b>	Measure	O	
			To identify a compo of use)	site unit of measure (See Figures Append	lix fo	r examples
Must Use	C00101	355	Unit or Basis for M	easurement Code	M	ID 2/2
Wast Osc	200101			units in which a value is being expressed.		
			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.

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

**Comments:** 

MEA~~PRQ~8955~KH~~~51 MEA~~PRQ~17910~K1~~~51

	Ref.	Data	Dutte En	ement Summary		
	Des.	Element	Name		Attı	ributes_
<b>Must Use</b>	$\overline{\text{MEA}02}$	738	Measurement Q	Qualifier	0	ID 1/3
			Code identifying	a specific product or process characteristic	to wh	ich a
			measurement app			
			PRQ	Product Reportable Quantity		
Must Use	MEA03	739	Measurement V	<b>alue</b>	X	R 1/20
			The value of the	measurement		
Must Use	MEA04	C001	<b>Composite Unit</b>	of Measure	X	
			To identify a composite unit of measure (See Figures Appendix for examples of use)			or examples
Must Use	C00101	355	Unit or Basis for	r Measurement Code	M	ID 2/2
				the units in which a value is being expressement has been taken Kilowatt Demand KW	<b>.u</b> , or r	
			K3	Kilovolt Amperes Reactive Hour		
				KVARH		
			KH	Kilowatt Hour		
				KWH		
Must Use	<b>MEA07</b>	935	Measurement S	ignificance Code	O	ID 2/2
			Code used to ber	nchmark, qualify or further define a measur	ement	value
			41	Off Peak		
			42	On Peak		
			51	Total		

**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	i Element Summai y		
	Ref. Des.	Data Element	<u>Name</u>			ributes
Must Use	DTM01	374	Date/Time Q	<i>Q</i> ualifier	M	ID 3/3
			Code specify	ing type of date or time, or both date and time		
			582	Report Period		
				The date/time of the end of the interval		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expresse	ed as CCYYMMDD		
Must Use	DTM03	337	Time		X	TM 4/8
			HHMMSSD, S = integer se	sed in 24-hour clock time as follows: HHMM, or or HHMMSSDD, where $H = \text{hours } (00\text{-}23)$ , $M = \text{conds } (00\text{-}59)$ and $DD = \text{decimal seconds}$ ; decir follows: $D = \text{tenths } (0\text{-}9)$ and $DD = \text{hundredths } (0\text{-}9)$	= mii mal se	nutes (00-59), econds are
			HHMM form	nat		

Segment:  $\mathbf{SE}$  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

Must Use	Ref. Des. SE01	Data Element 96	Name Number of Included Segments	Attr M	<u>ibutes</u> N0 1/10
Must Use	SE02	329	Total number of segments included in a transaction set incluses segments  Transaction Set Control Number	ding S'  M	T and SE  AN 4/9
			Identifying control number that must be unique within the tra functional group assigned by the originator for a transaction		on set

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

ComEd	Ameren
ST*867*0001	ST*867*0001
BPT*00*2013-04-19-19.35.43.150000*20130419*DD	BPT*00*1625429453201304190001*20130419*[
DTM*649*20130424*1000	DTM*649*20130425*144500
N1*8S*COMMONWEALTH EDISON CO*1*006929509	N1*8S*AMEREN ILLINOIS*1*006936017
N1*SJ*Supplier*9*007909111IL00	N1*SJ*Supplier*9*007909111IL00
N1*8R*CUSTOMER NAME	N1*8R*CUSTOMER NAME
REF*12*1234567890*GROUPB	REF*12*1234567890*GROUPC
REF*BLT*LDC	REF*LU*41128204
REF*PC*DUAL	REF*SPL*RATE ZONE III
REF*9V*Y	REF*BLT*LDC
PTD*SU	REF*PC*DUAL
DTM*150*20130321	REF*9V*Y
DTM*151*20130419	PTD*SU
REF*NH*R73	DTM*150*20130319
REF*LO*28	DTM*151*20130418
REF*PTC**SG05	REF*NH*DS3*DS - General Service (DS-3) Le
QTY*QD*1291*KH	REF*LO*DS3LL-
MEA*AA*PRQ*1291*KH***51	QTY*QD*24000*KH
MEA*AA*PRQ*3.56*K1***42	MEA*AA*PRQ*24000*KH***51
MEA*AA*PRQ*3.56*K1***41	PTD*PL
PTD*PL	DTM*150*20130319
DTM*150*20130321	DTM*151*20130418
DTM*151*20130419	REF*MG*91346000
REF*MG*141660000	REF*MT*K1MON
REF*KY*GS	REF*JH*A
REF*MT*K1MON	REF*4P*000320.0000
REF*JH*A	REF*IX*5.0
REF*4P*000001.0000	QTY*QD*24000*KH
REF*IX*5.0	MEA*AA*PRQ*24000*KH*8702*8777*51
QTY*QD*1291*KH	MEA*AA*PRQ*10240*KH*3493*3525*42
MEA*AA*PRQ*1291*KH*26963*28254*51	MEA*AA*PRQ*53.76*K1***41
MEA*AA*PRQ*3.56*K1**3.56*51	MEA*AA*PRQ*56.64*K1***42
SE*33*0001	SE*33*0001

Example #2 - Monthly Usage for Unmetered Service

Example #2 – Monthly Usage for Unmetered s	Service
ComEd	Ameren
ST*867*0001	ST*867*0001
BPT*00*2013-10-11-21.51.28.1111111*20131011*DD	BPT*00*9863008816201310110002*20131011*DD
DTM*649*20131016*1000	N1*8S*AMEREN ILLINOIS*1*006936017
N1*8S*COMMONWEALTH EDISON CO*1*006929509	N1*SJ*SUPPLIER*1*11111111
N1*SJ*SUPPLIER*9*123456789L00	N1*8R*CUSTOMER NAME
N1*8R*CUSTOMER NAME	REF*12*9863009999*GROUPB
REF*12*2863059999*GROUPD	REF*LU*95749999
REF*BLT*LDC	REF*SPL*RATE ZONE I
REF*PC*DUAL	REF*BLT*DUAL
REF*9V*Y	REF*PC*DUAL
PTD*SU	REF*9V*N
DTM*150*20130911	PTD*SU
DTM*151*20131011	DTM*150*20130911
REF*NH*R81	DTM*151*20131010
REF*LO*35	REF*NH*DS5*DS - Non-Residential Lighting
REF*PTC**SG02	REF*LO*LITE
QTY*QD*450*KH	QTY*QD*95*KH
MEA*AA*PRQ*450*KH***51	MEA*AA*PRQ*95*KH***51
PTD*BC	PTD*BC
DTM*150*20130911	DTM*150*20130911
DTM*151*20131011	DTM*151*20131010
QTY*QD*450*KH	REF*JH*A
SE*23*0001	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*111111111
N1*8R*CUSTOMER NAME
 REF*12*111111111111*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
                                                  (Continued from left)
 REF*LO*IDR
 QTY*QD*1645893*KH
   MEA*AA*PRQ*1645893*KH***51
                                                   QTY*QD*596*KH
PTD*PM
                                                     MEA**PRQ*596*KH***51
                        (FIRST METER)
 DTM*150*20100903
                                                     MEA**PRQ*620*K1***51
 DTM*151*20101005
                                                     DTM*582*20100903*0300
 REF*MG*11111111
 REF*MT*KH060
                                                  ... skipped through the end of the period
 REF*JH*A
                                                 for the second meter
 REF*4P*004800.0000
                                                   QTY*QD*726*KH
 OTY*OD*354*KH
   MEA**PRO*354*KH***51
                                                     MEA**PRO*726*KH***51
   MEA**PRQ*364*K1***51
                                                     MEA**PRQ*732*K1***51
                                                     DTM*582*20101005*0100
   DTM*582*20100903*0200
                                                  PTD*PM
 QTY*QD*318*KH
                                                                          (THIRD
   MEA**PRQ*318*KH***51
                                                  METER)
   MEA**PRO*332*K1***51
                                                   DTM*150*20100903
   DTM*582*20100903*0300
                                                   DTM*151*20101005
                                                   REF*MG*33333333
... skipped through the end of the period for the first
                                                   REF*MT*KH060
meter
                                                   REF*JH*A
                                                   REF*4P*004800.0000
 QTY*QD*225*KH
                                                   QTY*QD*1308*KH
   MEA**PRQ*225*KH***51
                                                     MEA**PRQ*1308*KH***51
   MEA**PRQ*240*K1***51
                                                     MEA**PRQ*1320*K1***51
   DTM*582*20101005*0100
                                                     DTM*582*20100903*0200
PTD*PM
                        (SECOND METER)
                                                   QTY*QD*1276*KH
 DTM*150*20100903
                                                     MEA**PRQ*1276*KH***51
                                                     MEA**PRO*1292*K1***51
 DTM*151*20101005
 REF*MG*2222222
                                                     DTM*582*20100903*0300
 REF*MT*KH060
                                                  ... skipped through the end of the period
 REF*JH*A
 REF*4P*004800.0000
                                                 for the third meter
 QTY*QD*629*KH
   MEA**PRQ*629*KH***51
                                                   QTY*QD*983*KH
     MEA**PRO*656*K1***51
                                                     MEA**PRO*983*KH***51
     DTM*582*20100903*0200
                                                     MEA**PRQ*1052*K1***51
                                                     DTM*582*20101005*0100
                                                 SE*9256*0001
```

#### Example #4 – Interval Usage

#### ComEd

```
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*11111111111*NONPOR
 REF*BLT*DUAL
 REF*PC*DUAL
 REF*9V*N
PTD*SU
 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
PTD*PM
                        (FIRST METER)
 DTM*150*20100303
 DTM*151*20100401
 REF*MG*117751111
                                             (Continued from left)
 REF*KY*IO
 REF*MT*K1030
 REF*JH*A
                                             REF*KY*IO
 REF*4P*000001.0000
                                              REF*MT*K1030
 REF*IX*5.0
                                              REF*JH*A
                                              REF*4P*00001.0000
 QTY*QD*8955*KH
   MEA**PRQ*8955*KH***51
                                              REF*IX*5.0
   MEA**PRQ*17910*K1***51
                                              QTY*QD*3915*KH
   DTM*582*20100304*0030
                                                MEA**PRO*3915*KH***51
 QTY*QD*9144*KH
                                                MEA**PRQ*7830*K1***51
   MEA**PRQ*9144*KH***51
                                                DTM*582*20100304*0030
                                              QTY*QD*3870*KH
   MEA**PRQ*18288*K1***51
   DTM*582*20100304*0100
                                                MEA**PRO*3870*KH***51
                                                MEA**PRQ*7740*K1***51
... skipped through the end of the period
                                                DTM*582*20100304*0100
 OTY*OD*8523*KH
   MEA**PRQ*8523*KH***51
                                             ... skipped through the end of the period
   MEA**PRQ*17046*K1***51
   DTM*582*20100401*2130
                                              QTY*QD*13.284*KH
 QTY*QD*8478*KH
                                                MEA**PRO*13.284*KH***51
   MEA**PRO*8478*KH***51
                                                MEA**PRQ*26.568*K1***51
   MEA**PRO*16956*K1***51
                                                DTM*582*20100401*2130
   DTM*582*20100401*2200
                                              QTY*QD*14.256*KH
PTD*PM
                        (SECOND METER)
                                                MEA**PRO*14.256*KH***51
 DTM*150*20100303
                                                MEA**PRQ*28.512*K1***51
 DTM*151*20100401
                                                DTM*582*20100401*2200
 REF*MG*145002222
                                             SE*33340*80001
```

# 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*PRO*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
                                               ← Community Solar Participant Ind. = Yes
 REF*AN*Y
                                               ← Total Consumption
 QTY*QD*2587*KH
   MEA*AA*PRO*2587*KH***51
 QTY*77*11.408*KH
                                               ← Total Off Site (Community Solar) Generation
   MEA*AF*PRO*11.408*KH***51
 QTY*QH*154*KH
                                               ← Starting Bank (Can be on- or off-site)
   MEA*AF*PRQ*154*KH***51
PTD*PL***OZ*EL
 DTM*150*20180501
 DTM*151*20180601
 REF*MG*99998888
 REF*MT*KHMON
 REF*JH*A
 REF*IX*6.0
 OTY*OD*2587*KH
   MEA*AA*PRO*2587*KH*56407*58994*51
PTD*PM***OZ*EL
 DTM*150*20180502
 DTM*151*20180601
 REF*MG*COMSLR
                                              ← Meter # is "COMSLR" for Community Solar
 REF*MT*KH060
 REF*JH*S
 OTY*OD*.0108*KH
   MEA**PRO*.0108*KH***51
     DTM*582*20180502*0100
 OTY*OD*.0104*KH
   MEA**PRQ*.0104*KH***51|
     DTM*582*20180502*0200|
 QTY*QD*.0116*KH|
   MEA**PRQ*.0116*KH***51|
   DTM*582*20180601*2359|
SE*1511*0003|
```