# Illinois

## Implementation

Guide

For

**Electronic** 

Data

Interchange

Transaction Set
ANSI ASC X12 Version 004010

867

**Daily Usage** 

Version 1.1

**Summary of Changes** 

1

October 27, 2014 • Initial Release.

May 6, 2015 • Updated Examples

#### **Implementation Notes**

Use

• This implementation guide is only used by Ameren for sending daily intervals. ComEd will provide similar information via the Supplier Portal.

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

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>

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 (RES) is required to take all service points on the account that is being enrolled. For Non-Mass Market accounts, the RES may choose which Service Points to serve. It is important to follow the requirements in each Implementation Guide to differentiate when a Service Point Identifier may or may not be sent.

### 867 Product Transfer and Resale Report

Functional Group ID=PT

#### **Introduction:**

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

#### **Heading:**

	Pos.	Seg.	Name	Req.	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>	Name	Req. Des.	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	O	1		
160	MEA	Measurements	О	40		
210	DTM	Date/Time Reference	O	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           160         MEA         Measurements	No.         ID         Name LOOP ID - PTD           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 Max Use Max Use         Repeat No.           010         PTD         Product Transfer and Resale Detail         M         1         1           020         DTM         Date/Time Reference         O         10         1           030         REF         Reference Identification         O         20         20           LOOP ID - QTY         >1         3         3         3         3         4         4           160         MEA         Measurements         O         40         4         4

#### **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: 1

**Purpose:** 

To indicate the start of a transaction set and to assign a control number

Syntax Notes:

**Semantic Notes:** 

1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

**Comments:** 

**Notes:** 

Required

ST~867~00000001

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

**Position:** 020

Loop:

Level: Heading Usage: Mandatory

Max Use:

Purpose: To indicate the beginning of the Product Transfer and Resale Report Transaction Set and

transmit identifying data

**Syntax Notes:** 1 If either BPT05 or BPT06 is present, then the other is required.

**Semantic Notes:** 1 BPT02 identifies the transfer/resale number.

2 BPT03 identifies the transfer/resale date.

3 BPT08 identifies the transfer/resale time.

4 BPT09 is used when it is necessary to reference a Previous Report Number.

**Comments:** 

Notes: Required

BPT~00~20150611123456789~20150611~DU

	Ref. Des.	Data Element	Name	·	Attr	ributes			
Must Use	BPT01	353	Transaction Set Purpose Code			ID 2/2			
			Code identifying pu	rpose of transaction set					
			00	Original					
				Conveys original readings for the account reported.	nt bei	ng			
Must Use	BPT02	127	Reference Identifie	cation	O	AN 1/30			
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier						
			A unique transaction identification number assigned by the originator of this transaction. This number should be unique over time.  Transaction Reference Numbers will only contain uppercase letters (A to Z),						
				es (-) and periods (.). Note that all other c					
			underscores, etc.) m			(a <b>r</b> ,			
Must Use	BPT03	373	Date		M	DT 8/8			
			Date expressed as C	CCYYMMDD					
			Transaction Creation the sender's applica	n Date. This is the date that the transaction system.	n wa	s created by			
Must Use	BPT04	755	Report Type Code		O	ID 2/2			
			Code indicating the	title or contents of a document, report or	suppo	orting item			
			DU	Commercial					
				Daily Usage					

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

**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.

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

N1~8S~UTILITY NAME~1~123456789

Must Use	Ref. <u>Des.</u> N101	Data Element 98	Name Entity Identifier Co	ode		ributes ID 2/3
			Code identifying an individual 8S	organizational entity, a physical location,  Consumer Service Provider (CSP)  Utility	prop	perty or an
Must Use	N102	93	Name Free-form name	Ounty	X	AN 1/60
Must Use	N103	66	Utility Name  Identification Code Qualifier  Code designating the system/method of code structure used for		<b>X</b> or Ide	ID 1/2 entification
			Code (67) 1 9	D-U-N-S Number, Dun & Bradstreet D-U-N-S+4, D-U-N-S Number with For Suffix	ır Ch	aracter
Must Use	N104	67	Identification Code Code identifying a p Utility D-U-N-S or		X	AN 9/13

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

**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.

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

Notes: Required

N1~SJ~RES COMPANY~1~987654321

#### **Data Element Summary**

Must Use	Ref. <u>Des.</u> N101	Data Element 98	Name Entity Identifier Co	ode		ributes ID 2/3	
			Code identifying an organizational entity, a physical location, ndividual			erty or an	
			SJ	Service Provider			
				Retail Electric Supplier (RES)			
Must Use	N102	93	Name		X	AN 1/60	
			Free-form name				
			RES Name				
Must Use	N103	66	<b>Identification Code</b>	· Qualifier	X	ID 1/2	
			Code designating the Code (67)	e system/method of code structure used for	or Ide	entification	
			1	D-U-N-S Number, Dun & Bradstreet			
			9	D-U-N-S+4, D-U-N-S Number with For Suffix	ır Ch	aracter	
Must Use	N104	67	<b>Identification Code</b>		X	AN 9/80	
			Code identifying a party or other code				
			RES D-U-N-S or D-	U-N-S+4 Number			

8

Segment: N1 Name (Customer)

**Position:** 080

Loop: N1 Optional

Level: Heading Usage: Optional

Max Use: 1

**Purpose:** To identify a party by type of organization, name, and code

**Syntax Notes:** 1 At least one of N102 or N103 is required.

2 If either N103 or N104 is present, then the other is required.

**Semantic Notes:** 

Comments: 1 This segment, used alone, provides the most efficient method of providing

organizational identification. To obtain this efficiency the "ID Code" (N104) must

provide a key to the table maintained by the transaction processing party.

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

**Notes:** Required

N1~8R~CUSTOMER NAME

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

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification} \,\, (\textbf{RES Account Number})$ 

**Position:** 120

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Purpose:** To specify identifying information

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

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 provided on the 814 Enrollment or 814 Change transaction.

REF~11~1234567890

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

Segment: REF Reference Identification (Utility Account Number)

**Position:** 120

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Purpose:** To specify identifying information

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

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

Ameren currently uses a 10-digit account number. All 10 digits, including leading zeros

must be provided.

REF~12~0000445648~GROUPA

	Ref.	Data						
	Des.	<b>Element</b>	<u>Name</u>		Attı	<u>ributes</u>		
Must Use	REF01	128	Reference Ident	ification Qualifier	M	ID 2/3		
			Code qualifying	the Reference Identification				
			12	Billing Account				
				Utility Account Number				
Must Use	REF02	127	Reference Identification		X	AN 1/30		
			specified by the I	nation as defined for a particular Transaction Reference Identification Qualifier	Set o	or as		
			Utility Account N	Number				
Must Use	REF03	352	Description		X	AN 1/80		
			A free-form description to clarify the related data elements and their content					
			This code indicat	tes the current class of customer in regards to	o the l	POR		
			Eligibility groups	s as of the time the transaction is sent.				
			GROUPA	POR Eligibility Group A				
				Residential POR Eligible Accounts				
			GROUPB	POR Eligibility Group B				
				Commercial Mass Market POR Eligible	e Acc	ounts		
			GROUPC	POR Eligibility Group C				
				Non-Mass Market POR Eligible Accou	nts			
			NONPOR	Account Not Eligible for POR				

Segment:  ${f REF}$  Reference Identification (Service Point Identifier)

**Position:** 120

Loop: N1 Optional

Level: Heading Usage: Optional Max Use: 12

**Purpose:** To specify identifying information

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

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

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** M ID 2/3 128 Code qualifying the Reference Identification LU Location Number Service Point Identifier **Must Use** REF02 127 **Reference Identification** X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Service Point Identifier

 $REF \ \ Reference \ Identification \ (Rate \ Zone)$ **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. 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. 1

**Notes:** Required

> 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	<u>Name</u> Reference Identific	eation Qualifier	Attr M	ributes ID 2/3
			Code qualifying the	Reference Identification		
			SPL	Standard Point Location Code (SPLC)		
				Rate Zone		
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

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:

Notes:

Required
There will only be 1 PTD~SU loop per transaction

PTD~SU~~~OZ~EL

**Data Element Summary** 

Code identifying the type of product transfer

SU Summary

This will be the total of all kWh presented on the 867

Daily Usage for this Service Point.

Must Use PTD04 128 Reference Identification Qualifier X ID 2/3

Code qualifying the Reference Identification

OZ Product Number

Commodity

Must Use 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

EL Electric

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 usage provided in the 867 Daily

Usage for this Service Point. DTM~150~20150608

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	<u>Name</u> Date/Tir	ne Qualifier	Attı M	ributes ID 3/3
			Code spe	ecifying type of date or time, or both date and time		
			150	Service Period Start		
Must Use	<b>DTM02</b>	373	Date		$\mathbf{X}$	<b>DT 8/8</b>
			Date exp	oressed 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 usage provided in the 867 Daily Usage

for this Service Point. DTM~151~20150609

Must Use	Ref. <u>Des.</u> DTM01	Data Element 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		X	<b>DT 8/8</b>
			Date exp	ressed as CCYYMMDD		

 $\textbf{Segment:} \quad \textbf{REF} \,\, \textbf{Reference Identification} \,\, \textbf{(Utility Rate Class)}$ 

**Position:** 030

**Loop:** PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 20

**Purpose:** To specify identifying information

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

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

			Dutu	Element Summary			
	Ref. <u>Des.</u>	Data Element	<u>Name</u>		Attı	<u>ributes</u>	
Must Use	REF01	128	Reference Ide	entification Qualifier	M	ID 2/3	
			Code qualifying	ng the Reference Identification			
			NH	Rate Card Number			
				Utility Rate Class			
Must Use	REF02	127	Reference Ide	entification	X	AN 1/30	
				ormation as defined for a particular Transaction he Reference Identification Qualifier Class	ı Set o	or as	
	REF03	352	Description		X	AN 1/80	
			A free-form description to clarify the related data elements and their content				
			Text Descripti	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** 

Ref. Data Des. **Element** Name Attributes **Must Use** REF01 128 **Reference Identification Qualifier** ID 2/3 Code qualifying the Reference Identification LO Load Planning Number Load Profile **Must Use** REF02 127 **Reference Identification** X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Load Profile

Segment: 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.

QTY04 is used when the quantity is non-numeric.

**Semantic Notes:** Comments:

**Notes:** There will be one QTY loop for each meter.

Required

QTY~QD~17~KH

		Data Licino	in Summary	
Ref. <u>Des.</u> QTY01	Data Element 673	Name Quantity Qualifier		Attributes M ID 2/2
		Code specifying the	type of quantity	
		KA	Estimated	
			Used when Quantity in QTY02 is an Est	imated Reading
		QD	Quantity Delivered	
			Used when Quantity in QTY02 is an Acc	tual Reading
QTY02	380	Quantity		X R 1/15
		Numeric value of qu	antity	
		Represents quantity period indicated.	of consumption delivered or generation re	eceived for the
QTY03	C001	<b>Composite Unit of </b>	Measure	0
		To identify a compo of use)	site unit of measure (See Figures Append	lix for examples
C00101	355	Unit or Basis for M	leasurement Code	M ID 2/2
		1 0		, or manner in
	Des. QTY01 QTY02 QTY03	Des. QTY01         Element 673           QTY02         380           QTY03         C001	Ref. Data Des. Element QTY01 673 Quantity Qualifier Code specifying the KA  QD  QTY02 380 Quantity Numeric value of quantity Represents quantity period indicated.  QTY03 C001 Composite Unit of To identify a composite unit of use)  C00101 355 Unit or Basis for Maccode specifying the which a measurement	Des. QTY01    Code specifying the type of quantity   KA   Estimated   Used when Quantity in QTY02 is an Est   QD   Quantity Delivered   Used when Quantity in QTY02 is an Act   QTY02   380   Quantity   Quantity   Quantity   Quantity   QTY02 is an Act   QTY03   Code specifying the unit of Measure   To identify a composite unit of measure (See Figures Appending of use)   Code specifying the units in which a value is being expressed which a measurement has been taken   KH   Kilowatt Hour   Code   Code specifying the units in which a value is being expressed which a measurement has been taken   KH   Kilowatt Hour   Code   Code specifying the units in which a value is being expressed which a measurement has been taken   KH   Kilowatt Hour   Code   Code specifying the units in which a value is being expressed which a measurement has been taken   KH   Kilowatt Hour   Code   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is being expressed   Code specifying the units in which a value is code   Code specifying the units in which a value is code   Code specifying the units in which a

Segment: MEA Measurements (Readings)

**Position:** 160

Loop: QTY Optional

Level: Detail
Usage: Optional
Max Use: 40

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

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

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

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

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

5 Only one of MEA08 or MEA03 may be present.

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

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

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

Notes: Required

MEA~AA~PRQ~87~KH~~~51

			Data Elem	ent Summary		
	Ref.	Data				
	Des.	<b>Element</b>	<u>Name</u>		Attı	<u>ributes</u>
Must Use	MEA01	737	Measurement Refe	erence ID Code	O	ID 2/2
			Code identifying th	e broad category to which a measurement	appl	ies
			AA	Meter reading-beginning actual/ending	actua	1
				Sent if all intervals included in the 867 actual	Daily	Usage are
			EE	Meter reading-beginning estimated/end	ing es	stimated
				Sent if any interval included in the 867 estimated	Daily	Usage is
<b>Must Use</b>	MEA02	738	Measurement Qua		О	ID 1/3
			Code identifying a measurement applied	specific product or process characteristic es	to wh	ich a
			PRQ	Product Reportable Quantity		
	MEA03	739	Measurement Valu	ue	$\mathbf{X}$	R 1/20
			The value of the me	easurement		
			Represents quantity period indicated.	of consumption delivered or generation	receiv	ved for the
	MEA04	C001	<b>Composite Unit of</b>	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 N	<b>Jeasurement Code</b>	M	ID 2/2
			Code specifying the which a measureme KH	e units in which a value is being expressed ent has been taken Kilowatt Hour	l, or r	nanner in
				KWH		
Must Use	MEA07	935	Measurement Sign	nificance Code	O	ID 2/2
			Code used to bench	mark, qualify or further define a measure	ment	value
			51	Total		

 $\textbf{Segment:} \quad \textbf{PTD} \,\, \textbf{Product Transfer and Resale Detail (Interval Metered Services Detail)}$ 

**Position:** 010

Loop: PTD Mandatory

Level: Detail Usage: Mandatory

Max Use: 1

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

provide identifying data

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

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

**Semantic Notes:** Comments:

**Must Use** 

**PTD05** 

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

Required PTD~DL

127

**Data Element Summary** 

Ref. Data Des. **Element** Name **Attributes Must Use** PTD01 521 **Product Transfer Type Code** M ID 2/2 Code identifying the type of product transfer DL Oil Deliveries A DL loop will be provided for each interval meter. PTD04 128 **Reference Identification Qualifier Must Use** X ID 2/3 Code qualifying the Reference Identification ΟZ Product Number Commodity

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

EL Electric

**Reference Identification** 

X AN 1/30

 $Segment: \quad DTM \ \ Date/Time \ Reference \ (Meter \ Change \ Date)$ 

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~514~20150609

#### **Data Element Summary**

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

Date expressed as CCYYMMDD

**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 unless replaced by DTM\*514 for a Meter Exchange

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

DTM~150~20150608

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374		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 unless replaced by DTM\*514 for a Meter Exchange

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

DTM~151~20150609

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Tir	ne Qualifier	Attı M	ributes ID 3/3
			Code spe	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	ressed as CCYYMMDD		

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

**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~MG~12345

**Data Element Summary** 

Ref. Data Des. **Element** Name Attributes **Must Use** REF01 128 **Reference Identification Qualifier** ID 2/3 Code qualifying the Reference Identification MG Meter Number Meter Number **Must Use** REF02 127 **Reference Identification** X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Meter Number

**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 applicable

REF~KY~BMG

**Data Element Summary** 

Ref. Data

Des. Element Name

Must Use REF01 128 Reference Identification Qualifier

Code qualifying the Reference Identification

Code qualifying the Reference Identification

KY

Site Specific Procedures, Terms, and Conditions

Special Meter Configuration

Must Use REF02 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Special Meter Configuration

BMG Behind the Meter Generation (Ameren)

NM-BI Net Metering - Bidirectional Meter (Ameren)

NM-GG Net Metering - Gross Generation Meter (Ameren)

NM-GL Net Metering - Gross Load Meter (Ameren)

Segment:  ${f REF}$  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

D-4-

REF~MT~KH060

#### **Data Element Summary**

Must Use	Ref. <u>Des.</u> REF01	Element 128	<u>Name</u> Reference Id	entification Qualifier	Attı M	ributes ID 2/3
			Code qualifyi	ng the Reference Identification		
			MT	Meter Ticket Number		
				Meter Type		
Must Use	REF02	127	Reference Id	entification	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 KH Kilowatt Hour (kWh)

Metering Interval Reported for Billing Purposes nnn Number of minutes from 001 to 999 060 60 minute interval

For Example:

KH060 Kilowatt Hours per 60 minute interval

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

**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.

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

**Semantic Notes:** Comments:

Notes: Required

REF~JH~A

35	Ref. Des.	Data Element	<u>Name</u>	and the control of the		ributes
Must Use	REF01	128		ification Qualifier	M	ID 2/3
			Code qualifying	the Reference Identification		
			JH	Tag		
				Meter Role		
Must Use	REF02	127	Reference Ident	ification	X	AN 1/30
				nation as defined for a particular Transaction Reference Identification Qualifier	Set	or as
				A 1 1111		
			A	Additive - this consumption contributed summarized total (do nothing).	to th	e
			I	Ignore - this consumption did not contri summarized total (do nothing).	bute	to the
			S	Subtractive - this consumption needs to from the summarized total.	be su	btracted

Segment: REF Reference Identification (Meter Constant)

**Position:** 030

**Loop:** PTD Mandatory

Level: Detail
Usage: Optional
Max Use: 20

**Purpose:** To specify identifying information

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

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**

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identification Qualifier	Attributes M ID 2/3
			Code qualifying the Reference Identification	
			4P Affiliation Number	
			Meter Constant (Meter Mu	ıltiplier)
			(Ending Reading - Beginn	ing Reading) * Meter
			Constant = Consumption	
Must Use	REF02	127	Reference Identification	X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Meter Constant

Segment:  ${f REF}$  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:

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 Attributes Must Use** REF01 **Reference Identification Qualifier** M ID 2/3 128 Code qualifying the Reference Identification Item Number IX Number of Dials **Must Use** REF02 127 **Reference Identification** X AN 1/3

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Number of Dials

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

**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:

1 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 Element 128	Name Reference Identific		Attr M	ributes ID 2/3
			Code qualifying the	Reference Identification		
			CO	Customer Order Number		
				Transformer Loss Multiplier		
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30
				on as defined for a particular Transaction ference Identification Qualifier	Set o	or as

Transformer Loss Multiplier

Segment: QTY Quantity

**Position:** 110

**Loop:** QTY Optional

Level: Detail
Usage: Optional
Max Use: 1

**Purpose:** To specify quantity information

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

2 Only one of QTY02 or QTY04 may be present.

1 QTY04 is used when the quantity is non-numeric.

**Semantic Notes:** Comments:

**Notes:** There will be one QTY loop for each meter and meter role (additive/subtractive).

Required if there are metered services on the account.

QTY~QD~1234~KH

	Ref.	Data			
	Des.	<b>Element</b>	<u>Name</u>		<b>Attributes</b>
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 an Es	timated Reading
			QD	Quantity Delivered	
				Used when Quantity in QTY02 is an Ac	ctual Reading
Must Use	QTY02	380	Quantity		X R 1/15
			Numeric value of qu	antity	
			Represents quantity period indicated.	of consumption delivered or generation r	received for the
	QTY03	C001	<b>Composite Unit of</b>	Measure	0
			To identify a compo of use)	site unit of measure (See Figures Appen	dix for examples
Must Use	C00101	355	Unit or Basis for M	leasurement 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	l, or manner in
				KWH	

**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~582~20150608~1500

Buta Element Summary									
Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualifier			Attributes M ID 3/3			
				ifying 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 expre	essed as CCYYMMDD					
Must Use	DTM03	337	Time		X	TM 4/8			
			Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where $H = hours$ (00-23), $M = minutes$ (00-59), $S = integer$ seconds (00-59) and $DD = decimal$ seconds; decimal seconds are expressed as follows: $D = tenths$ (0-9) and $DD = hundredths$ (00-99)						
			HHMM fo	rmat					

Segment: **SE** Transaction Set Trailer

**Position:** 030

Loop:

Level: Summary Usage: Mandatory

Max Use: 1

**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

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

**Notes:** Required

SE~21~00000001

Must Use	Ref. <u>Des.</u> SE01	Data <u>Element</u> 96	Name Number of Included Segments	Attr M	ributes N0 1/10			
			Total number of segments included in a transaction set including ST and SE segments					
Must Use	SE02	329	Transaction Set Control Number	M	AN 4/9			
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set					

#### Example #1 – Daily Usage for One Meter for One Day

ST\*867\*0001 BPT\*00\*0113118073201502100001\*20150210\*DU N1\*8S\*AMEREN ILLINOIS\*1\*006936017 N1\*SJ\*Electric Supplier\*1\*012345678 N1\*8R\*CUSTOMER NAME REF\*12\*1234567890\*GROUPA REF\*LU\*12345678 REF\*SPL\*RATE ZONE III PTD\*SU\*\*\*OZ\*EL DTM\*150\*20150209 DTM\*151\*20150209 REF\*NH\*DS1\*DS - Residential (DS-1) **REF\*LO\*UNKNWN** QTY\*QD\*23.9912\*KH MEA\*AA\*PRQ\*23.9912\*KH\*\*\*51 PTD\*DL\*\*\*OZ\*EL DTM\*150\*20150209 DTM\*151\*20150209 REF\*MG\*15298224 REF\*MT\*KH060 REF\*JH\*A REF\*IX\*6.0 REF\*4P\*000002.0000 QTY\*QD\*.5744\*KH DTM\*582\*20150209\*0100 QTY\*QD\*1.1004\*KH DTM\*582\*20150209\*0200 QTY\*QD\*.5612\*KH DTM\*582\*20150209\*0300 QTY\*QD\*.5316\*KH DTM\*582\*20150209\*0400 QTY\*QD\*.56\*KH DTM\*582\*20150209\*0500 QTY\*QD\*1.0676\*KH DTM\*582\*20150209\*0600 QTY\*QD\*1.4292\*KH DTM\*582\*20150209\*0700 QTY\*QD\*.6652\*KH DTM\*582\*20150209\*0800 QTY\*QD\*.3708\*KH DTM\*582\*20150209\*0900 QTY\*QD\*.3508\*KH DTM\*582\*20150209\*1000 QTY\*QD\*.8832\*KH DTM\*582\*20150209\*1100 QTY\*QD\*.352\*KH DTM\*582\*20150209\*1200 QTY\*QD\*.336\*KH DTM\*582\*20150209\*1300 QTY\*QD\*.3576\*KH DTM\*582\*20150209\*1400 QTY\*QD\*.3296\*KH DTM\*582\*20150209\*1500 QTY\*QD\*.9156\*KH DTM\*582\*20150209\*1600 QTY\*QD\*.4328\*KH

CPWG 867 Daily Usage Version 1.1

DTM\*582\*20150209\*1700 QTY\*QD\*1.7456\*KH DTM\*582\*20150209\*1800 QTY\*QD\*2.2656\*KH DTM\*582\*20150209\*1900 QTY\*QD\*1.1496\*KH DTM\*582\*20150209\*2000 QTY\*QD\*2.1948\*KH DTM\*582\*20150209\*2100 QTY\*QD\*2.0732\*KH DTM\*582\*20150209\*2200 QTY\*QD\*3.1328\*KH DTM\*582\*20150209\*2300 QTY\*QD\*.6116\*KH DTM\*582\*20150209\*2359 SE\*72\*0001

#### **Example #2 – Daily Usage for One Meter for Two Days**

ST\*867\*0001 BPT\*00\*6994892018201410030001\*20150306\*DU N1\*8S\*AMEREN ILLINOIS\*1\*006936017 N1\*SJ\*Supplier\*1\*11111111 N1\*8R\*CUSTOMER NAME REF\*12\*1234567890\*GROUPB REF\*LU\*12345678 REF\*SPL\*RATE ZONE III PTD\*SU\*\*\*OZ\*EL DTM\*150\*20150304 DTM\*151\*20150305 REF\*NH\*DS2\*DS - Small General Service (DS REF\*LO\*IDR QTY\*QD\*655.613\*KH MEA\*EE\*PRQ\*655.613\*KH\*\*\*51 PTD\*DL\*\*\*OZ\*EL DTM\*150\*20150304 DTM\*151\*20150305 REF\*MG\*08271000 REF\*MT\*KH060 REF\*JH\*A REF\*IX\*6.0 QTY\*KA\*4.549\*KH DTM\*582\*20150304\*0100 QTY\*KA\*5.3005\*KH DTM\*582\*20150304\*0200 QTY\*QD\*5.0425\*KH DTM\*582\*20150304\*0300 ... skipped 43 intervals QTY\*QD\*5.2195\*KH DTM\*582\*20150305\*2300 QTY\*QD\*5.195\*KH DTM\*582\*20150305\*2359 SE\*119\*0001