

Illinois

Implementation
Guide
For
Electronic
Data
Interchange

Transaction Set
ANSI ASC X12 Version 004010

867

Historical Usage

Version 2.7

Summary of Changes

- | | |
|-----------------------------------|---|
| January 6, 2009 | <ul style="list-style-type: none">• Initial Release. |
| October 24, 2009
Version 1.1 | <ul style="list-style-type: none">• Change Control #013 – Fix IG to have one PTD*BQ loop per service period. |
| January 6, 2011
Version 1.2 | <ul style="list-style-type: none">• Change Control #016 – Updated POR Eligibility Group Codes.• Change Control #018 – Removed old examples and added production examples from Ameren and test examples from ComEd. Fixed language in Notes section regarding PTD loops.• Change Control #022 – Added REF*SPL for Ameren’s Rate Zone.• Corrected X12 values under “Attributes” column and headings of each page. |
| October 6, 2011
Version 1.3 | <ul style="list-style-type: none">• Change Control #034 – Clarified REF03 of REF*NH to explain Ameren’s inclusion of code “SH” for Space Heating.• Change Control #036 – Added section to Implementation Notes for Space Heating. |
| June 7, 2013
Version 2.0 | <ul style="list-style-type: none">• Change Control #040 – Added requirements for Ameren Gas |
| October 14, 2013
Version 2.1 | <ul style="list-style-type: none">• Change Control #041 – Added examples for Ameren Gas and corrected the QTY01 code to “MX” for MDCQ. |
| January 23, 2015
Version 2.2 | <ul style="list-style-type: none">• Change Control #042 – Added AMI Data Availability (REF*KX). |
| May 29, 2015
Version 2.3 | <ul style="list-style-type: none">• Change Control #042 – Added Ameren Examples. |
| October 15, 2016
Version 2.4 | <ul style="list-style-type: none">• Change Control #048 – Modified requirements to allow Gas Suppliers to request Historical Interval Usage. |
| July 10, 2018
Version 2.5 | <ul style="list-style-type: none">• Change Control #050 – Added Community Solar Participant Indicator (REF*AN), Special Meter Configuration (REF*KY). |
| November 16, 2018
Version 2.6 | <ul style="list-style-type: none">• Change Control #051 – Added Total Off-site Generation QTY/MEA, Total On-site Generation QTY/MEA, and Starting Bank QTY/MEA. Updated PTD*BQ Loop comment on QTY regarding Community Solar as well as on-site generation having their own PTD loop. |
| November 30, 2018
Version 2.6 | <ul style="list-style-type: none">• Correction: Removed the Updated PTD*BQ Loop comment on QTY regarding Community Solar as well as on-site generation having their own PTD loop and replaced it with “The Interval Details will only contain the Consumption kWh.” Also corrected the examples in the gray box on new QTY segments to include DTMs. |
| September 30, 2019
Version 2.7 | <ul style="list-style-type: none">• Change Control #052 - Added Low Income Customer Indicator (REF*5E). |

Implementation Notes

Use of this document

- Historical usage will be provided upon request from the RES/GS. Historical usage can be sent in either a Historical Interval Usage (HI) or Historical Monthly Usage (HU) transaction depending on how it was requested on the 814 Enrollment Request (HU only) or 814 Historical Usage Request (HI or HU).

PTD Loops Definition

- For Historical Usage (HU) the following PTD loops will be sent:
 - The PTD~SU loop is used to show the total usage for the account/service point. There will only be one PTD loop per transaction and is always required.
 - The PTD~FG loop will be used to show scheduling determinants (capacity obligation, etc.)
- For Historical Interval Usage (HI) the following PTD loops will be sent:
 - The PTD~SU loop is used to show the total usage for the account/service point. There will only be one PTD loop per transaction and is always required.
 - The PTD~BQ loop is used to show interval usage by account/service point. There will be one PTD~BQ loop for each service period for each service point with multiple QTY loops for the different units of measure or measurement significance codes.
 - The PTD~FG loop will be used to show scheduling determinants (capacity obligation, etc.)

Definition of Mass Market Customers

- Ameren Mass Market
 - Electric - Includes any account containing one or more of only the following types of service points: DS-1 (residential), DS-2 (small commercial < 150 kW) or DS-5 (lighting).
 - Gas – Includes any account containing one or more of only the following types of service points: GDS-1 (residential) and GDS-2 (small general gas delivery - provided that GDS-2 service point(s) are not on the Rider T gas transportation option).
- ComEd Mass Market – Includes all residential and commercial customers under 100 kW.

Definition of Service Point

- Ameren's systems operate at a Service Point level. A service point consists of metered or unmetered load that is assigned to a specific Ameren rate. A service point containing metered load can have one or more meters associated with it. An Ameren account may have multiple electric service points associated with it. For Mass Market accounts, the Retail Electric Supplier/Gas Supplier (RES/GS) is required to take all service points on the account that is being enrolled. For Non-Mass Market accounts, the RES/GS may choose which Service Points to serve. It is important to follow the requirements in each Implementation Guide to differentiate when a Service Point Identifier may or may not be sent.
- ComEd operates at an Account Level only.

Space Heating

- For Ameren, a service point that is eligible for the space heat rate is identified with an "SH" in the text description of the rate class at the beginning of the REF03 (Utility Rate Class) segment.

One Commodity per
Transaction

- For ComEd, space heat customers are identified in the REF03 (Utility Rate Class) segment with an NH code and a text description of the applicable space heat rate class.
- Each submitted transaction may be valid for only one commodity (i.e., electric or gas).

867 Product Transfer and Resale Report

Functional Group ID=**PT**

Introduction:

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

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BPT	Beginning Segment for Product Transfer and Resale	M	1		
	050	DTM	Date/Time Reference	O	10		
LOOP ID - N1						5	
	080	N1	Name	O	1		
	120	REF	Reference Identification	O	12		

Detail:

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

Summary:

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

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:
Notes: Required
 ST~867~000000001

Data Element Summary

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

Segment: **BPT** Beginning Segment for Product Transfer and Resale

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

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

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

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

2 BPT03 identifies the transfer/resale date.

3 BPT08 identifies the transfer/resale time.

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

Comments:

Notes: Required

BPT~52~20131012123456789~20131201~DD

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	BPT01	353	Transaction Set Purpose Code Code identifying purpose of transaction set 52 Response to Historical Inquiry Response to a request for historical meter reading.	M ID 2/2
Must Use	BPT02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A unique transaction identification number assigned by the originator of this transaction. This number should be unique over time. Transaction Reference Numbers will only contain uppercase letters (A to Z), digits (0 to 9), dashes (-) and periods (.). Note that all other characters (spaces, underscores, etc.) must be excluded.	O AN 1/30
Must Use	BPT03	373	Date Date expressed as CCYYMMDD Transaction Creation Date. This is the date that the transaction was created by the sender's application system.	M DT 8/8
Must Use	BPT04	755	Report Type Code Code indicating the title or contents of a document, report or supporting item C1 Cost Data Summary Indicates transaction is a Historical Interval usage transaction with only interval meters on the account. DD Distributor Inventory Report Indicates transaction is a Historical non-interval usage transaction. DR Datalog Report Mixed Values - Sent on historical interval transaction if the account has both interval and non-interval meters.	O ID 2/2

Segment: **DTM** Date/Time Reference (Eligible to switch)
Position: 050
Loop:
Level: Heading
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 if customer is not currently eligible to switch
 If customer currently is not available to switch, this will be used to indicate when the customer will be eligible to switch.
 DTM~307~20131225

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			307 Eligibility	
			Date Customer is eligible to switch	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Date	

Segment: **N1** Name (Utility)
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
 N1~8S~UTILITY NAME~1~123456789

Data Element Summary

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

Segment: **N1** Name (Retail Electric Supplier/Gas Supplier)
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~SJ~RES/GS COMPANY~1~049612345

Data Element Summary

	Ref.	Data	Attributes
	Des.	Element Name	
Must Use	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		SJ Service Provider	
		Retail Electric Supplier (RES) or Gas Supplier (GS)	
Must Use	N102	93 Name	X AN 1/60
		Free-form name	
		RES/GS Name	
Must Use	N103	66 Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	N104	67 Identification Code	X AN 9/80
		Code identifying a party or other code	
		RES/GS D-U-N-S or D-U-N-S+4 Number	

Segment: **N1** Name (Customer)
Position: 080
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes:

- 1 At least one of N102 or N103 is required.
- 2 If either N103 or N104 is present, then the other is required.

Semantic Notes:
Comments:

- 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
- 2 N105 and N106 further define the type of entity in N101.

Notes: Required
N1~8R~CUSTOMER NAME

Data Element Summary

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

Segment: **REF** Reference Identification (RES/GS Account Number)
Position: 120
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Optional
 If the account is enrolled and was provided on the enrollment or change transaction, the Utility will include the RES/GS account number on all transactions. If the account is not already enrolled with the RES/GS, the Utility will not return the RES/GS account number.
 REF~11~1234567890

Data Element Summary

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

Segment: **REF** Reference Identification (Utility Account Number)
Position: 120
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Required
 Both utilities currently have 10-digit account numbers. All 10 digits, including leading zeros must be provided.
 REF~12~0000445648~GROUPA

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 12 Billing Account Utility Account Number	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Utility Account Number	X AN 1/30
Must Use	REF03	352	Description A free-form description to clarify the related data elements and their content Electric: This code indicates the current class of customer in regard to the POR Eligibility groups as of the time the transaction is sent. Gas: Not Used GROUPA POR Eligibility Group A Ameren: Residential POR Eligible Accounts ComEd: Residential GROUPB POR Eligibility Group B Ameren: Commercial Mass Market POR Eligible Accounts ComEd: Commercial Mass Market POR Eligible Accounts (watt-hour/small) GROUPC POR Eligibility Group C Ameren: Non-Mass Market POR Eligible Accounts ComEd: Non-Mass Market POR Eligible Accounts (medium) GROUPD POR Eligibility Group D Ameren: Not Used ComEd: Lighting NONPOR Account Not Eligible for POR	X AN 1/80

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

Position: 120

Loop: N1 Optional

Level: Heading

Usage: Optional

Max Use: 12

Purpose: To specify identifying information

Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:

Notes:

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

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

Data Element Summary

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

Segment: **REF** Reference Identification (Rate Zone)
Position: 120
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes:

Ameren: Required
 ComEd: Not Used
 REF~SPL~RATE ZONE I
 REF~SPL~RATE ZONE II
 REF~SPL~RATE ZONE III

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			SPL	Standard Point Location Code (SPLC)
			Rate Zone	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Rate Zone	

Segment: **PTD** **Product Transfer and Resale Detail (Summary)**
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes:
1 If either PTD02 or PTD03 is present, then the other is required.
2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:
Comments:

Notes:
 Required
 There will only be 1 PTD~SU loop per transaction.
 PTD~SU
 PTD~SU~~~OZ~EL

Data Element Summary

Ref.	Data	Name	Attributes
Des.	Element		
Must Use	PTD01	521 Product Transfer Type Code Code identifying the type of product transfer SU Summary Consumption Summarized/Totalized For Ameren, it will be by service point. For ComEd, it will be by account/rate class.	M ID 2/2
	PTD04	128 Reference Identification Qualifier Code qualifying the Reference Identification Ameren: Required ComEd: Not Used OZ Product Number Commodity	X ID 2/3
	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	X AN 1/30

Segment: **REF** Reference Identification (Utility Rate Class)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Required
REF~NH~GS1~Large GS
REF~NH~DS1~SH-DS - Residential (DS-1)

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification NH Rate Card Number Utility Rate Class	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Utility Rate Class	X AN 1/30
	REF03	352	Description A free-form description to clarify the related data elements and their content Text Description of Rate Class For Ameren, "SH" indicates that the given service point is either eligible for or is currently on an Ameren Basic Generation Service (BGS) or System Gas Service (SGS) space heating rate. For ComEd, space heat rate customers are identified by a text description of the applicable space heat rate class.	X AN 1/80

Segment: **REF** Reference Identification (Load Profile)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Required
REF~LO~GS

Data Element Summary

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

Segment: **REF** Reference Identification (Supply Group)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Note: Supply group will be shown in REF03 due to the length of the supply group names.
ComEd: Required
Ameren: Not Used

Customer supply groups are designations for retail customers located in the Company's service territory so that retail customers can be categorized for the purposes of computing charges for the procurement of electric power and energy and applying such charges to retail customers. Please see the ComEd tariff for additional details.
REF~PTC~~Self-Generating

Data Element Summary

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

Segment: **REF** Reference Identification (AMI Data Availability)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: This segment is used to inform the RES whether AMI Interval Data is available; it does not indicate that interval details will be sent. If the RES wants to receive AMI Interval Data on a daily basis, then they would need to send REF~17~DAILY in either the 814 Enrollment Request or the 814 Change Request (after enrolling the account).
Ameren Electric: Required
ComEd: Not Used
Gas: Not Used
REF~KX~AMI

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification KX Representation AMI Data Availability	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier AMI AMI Interval Data is Available AMI Interval Data is available for at least one meter on this Service Point. The RES may send a Change Request for the AMI Data Preference Indicator (REF~17) to request to receive AMI interval details. NOTAMI AMI Interval Data is Not Available	X AN 1/30

Segment: **REF** Reference Identification (Community Solar Participant Indicator)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Ameren Electric: Required
 ComEd: Not Used
 Gas: Not Used

REF~AN~N

Data Element Summary

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

Segment: **REF** Reference Identification (Special Meter Configuration)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Ameren Electric: Required if the Service Point has net metering
 ComEd: Not Used
 Gas: Not Used

REF~KY~NM-BI

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification KY Site Specific Procedures, Terms, and Conditions Special Meter Configuration	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier BMG Behind the Meter Generation NM-BI Net Metering - Bidirectional Meter NM-GG Net Metering - Gross Generation Meter NM-GL Net Metering - Gross Load Meter	X AN 1/30

Segment: **REF** Reference Identification (Low Income Customer Indicator)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Required if applicable
REF~5E~Y

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 5E Consumer Identifier Low Income Customer Indicator	M ID 2/3
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier N No Y Yes This customer has not received financial assistance in the previous 12 months from the Low Income Home Energy Assistance Program and is not currently participating in the Percentage of Income Payment Plan. This customer either received financial assistance in the previous 12 months from the Low Income Home Energy Assistance Program or is currently participating in the Percentage of Income Payment Plan.	X AN 1/30

Segment: QTY Quantity (Consumption)
Position: 110
Loop: QTY Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify quantity information
Syntax Notes: 1 At least one of QTY02 or QTY04 is required.
 2 Only one of QTY02 or QTY04 may be present.
Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.
Comments:
Notes: Required - There may 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~1234~KH
 QTY~KA~150~TD

Data Element Summary

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

Segment: **MEA** Measurements (Consumption)
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

One MEA is required for each unit of measure (kW, kWh, KVARH, Therms) to report the total consumption/demand (MEA07=51) and additional MEA segments will be provided if Time of Use is applicable (MEA07 = 41 or 42)

If the meter registers on and off peak, the utility will send 0 if there was no usage, if the meter does NOT register on and off peak, it will not be sent.

MEA~~PRQ~1234~KH~~~51

MEA~~PRQ~150~TD~~~51

Data Element Summary

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

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

Required

This date reflects the beginning of the data range for this usage.

DTM~150~20130824

Data Element Summary

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

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

Required

This date reflects the ending of the data range for this usage.

DTM~151~20130901

Data Element Summary

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

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

Ameren: Required when service point has on-site generation.
 ComEd: Not Used
 QTY~87~300~KH
 MEA*AF*PRQ*300*KH***51
 DTM*150*20181125
 DTM*151*20181224

Data Element Summary

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

Segment: **MEA** Measurements (On-Site Generation)
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:

Comments:

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:

Ameren: Required when service point has on-site generation.
ComEd: Not Used
QTY*87*300*KH
MEA*AF*PRQ*300*KH***51

Data Element Summary

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

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

Required

This date reflects the beginning of the data range for this usage.

DTM~150~20130824

Data Element Summary

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

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

Required

This date reflects the ending of the data range for this usage.

DTM~151~20130901

Data Element Summary

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

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

Ameren: Required when customer has off-site generation such as Community Solar.
 ComEd: Not Used
 QTY*77*100*KH
 MEA*AF*PRQ*100*KH***51
 DTM*150*20181125
 DTM*151*20181224

Data Element Summary

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

Segment: **MEA** Measurements (Off-Site Generation)

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:

Comments:

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:

Ameren: Required when customer has off-site generation such as Community Solar.
 ComEd: Not Used
 MEA~~PRQ~1234~KH~~~51
 MEA~~PRQ~150~TD~~~51

Data Element Summary

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

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

Required

This date reflects the beginning of the data range for this usage.

DTM~150~20130824

Data Element Summary

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

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

Required

This date reflects the ending of the data range for this usage.

DTM~151~20130901

Data Element Summary

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

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

Ameren: Required when service point has a Starting Bank.
 ComEd: Not Used
 QTY*QH*500*KH
 MEA*AF*PRQ*500*KH***51
 DTM*150*20181125
 DTM*151*20181224

Data Element Summary

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

Segment: **MEA** Measurements (Starting Bank)
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:

Comments:

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:

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

Data Element Summary

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

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

Required

This date reflects the beginning of the data range for this usage.

DTM~150~20130824

Data Element Summary

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

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

Required

This date reflects the ending of the data range for this usage.

DTM~151~20130901

Data Element Summary

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

Segment: **PTD** **Product Transfer and Resale Detail (Interval Metered Services Detail)**
Position: 010
Loop: PTD Mandatory
Level: Detail
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data

Syntax Notes:
 1 If either PTD02 or PTD03 is present, then the other is required.
 2 If either PTD04 or PTD05 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

PTD Loops may be sent in any order.
 Required if this is an interval account and HI was requested on the 814 Historical usage request. There will be one PTD~BQ loop for each service period for each service point.
 PTD~BQ
 PTD~BQ~~~OZ~EL

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
Must Use	PTD01	521 Product Transfer Type Code Code identifying the type of product transfer BQ Other Total interval usage for all meters on the account	M ID 2/2
	PTD04	128 Reference Identification Qualifier Code qualifying the Reference Identification Ameren: Required ComEd: Not Used OZ Product Number Commodity	X ID 2/3
	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	X AN 1/30

Segment: **DTM** Date/Time Reference (Service Period Start)
Position: 020
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

Required
 This date reflects the beginning of the date range for this transaction.
 DTM~150~20131201

Data Element Summary

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

Segment: **DTM** Date/Time Reference (Service Period End)
Position: 020
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Notes:

Required
 This date reflects the ending of the date range for this transaction.
 DTM~151~20131231

Data Element Summary

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

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 interval for the meter with individual MEA segments for each type of consumption (i.e., kW, kWh, kVARH). The Interval Details will only contain the Consumption kWh. The Interval Details will not contain community solar generation data or net metered generation data.
 Required if there are interval metered services on the account.
 QTY~QD~1.368~KH
 MEA~~PRQ~1.368~KH~~~51
 MEA~~PQ~2.0448~K1~~~51

Data Element Summary

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

Segment: **MEA** Measurements (Readings)

Position: 160

Loop: QTY Optional

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

Syntax Notes:

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

Semantic Notes:

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

Comments:

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

Notes:

Required

QTY~QD~1.368~KH
 MEA~~PRQ~1.368~KH~~~51
 MEA~~PRQ~2.0448~K1~~~51

Data Element Summary

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

Segment: **DTM** Date/Time Reference (Report Period)
Position: 210
Loop: QTY Optional
Level: Detail
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes:

- 1 At least one of DTM02 DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:
Comments:

Notes: End date and time of the period for which the quantity is provided. Each interval must be explicitly labeled with the date and time.
Required
DTM~582~20131215~1500

Data Element Summary

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

Segment: **PTD** **Product Transfer and Resale Detail (Scheduling Determinants)**
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: This PTD Loop will be used to provide scheduling determinants, such as the capacity obligation, transmission obligation, etc.
 Required
 PTD~FG
 PTD~FG~~~OZ~EL

Data Element Summary

Ref. Des.	Data Element	Name	Attributes
Must Use	PTD01	521 Product Transfer Type Code Code identifying the type of product transfer FG Flowing Gas Information Scheduling Determinants. This loop will provide information required.	M ID 2/2
	PTD04	128 Reference Identification Qualifier Code qualifying the Reference Identification Ameren: Required ComEd: Not Used OZ Product Number Commodity	X ID 2/3
	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	X AN 1/30

Segment: **REF** Reference Identification (Bill Cycle)
Position: 030
Loop: PTD Mandatory
Level: Detail
Usage: Optional
Max Use: 20
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

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

Comments:
Notes: Required
REF~BF~12

Data Element Summary

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

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

Ameren: Not Used
 ComEd: Required

Zero values may be sent if the utility is, in fact, stating that there is no contribution for this customer's account.

The QTY/DTM loop may be sent twice depending on the time of year that Historical Usage is being provided. One iteration will show the current PLC (capacity contribution) and a second iteration will show the PLC that will be effective in the period defined in the DTM segment. Currently ComEd changes the PLC effective June 1st. Once ComEd is aware of what the next effective PLC will be (typically in January) they will begin providing it on transactions.

For example, in February 2013 you may receive:
 QTY~KC~476~K1
 DTM~007~~~~RD8~20120601-20130531
 QTY~KC~450~K1
 DTM~007~~~~RD8~20120601-20130531

Whereas in September 2013 you would only receive one loop because the following year's PLC is undetermined:
 QTY~KC~450~K1
 DTM~007~~~~RD8~20120601-20130531

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity KC Net Quantity Decrease Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM peak).	M ID 2/2
Must Use	QTY02	380	Quantity Numeric value of quantity Peak Load Contribution (PLC)	X R 1/15
Must Use	QTY03	C001	Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	O
Must Use	C00101	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand KW	M ID 2/2

Segment: **DTM** **Date/Time Reference (PLC Effective Date)**
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:

Required if PLC is sent
 Capacity Contribution is for June 1 - the following May 31. Therefore, this date range is to reflect when the value shown in the QTY02 is in effect.
 DTM~007~~~~RD8~20120601-20130531

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type of date or time, or both date and time	
			007 Effective	
			PLC Effective Date	
Must Use	DTM05	1250	Date Time Period Format Qualifier	X ID 2/3
			Code indicating the date format, time format, or date and time format	
			RD8 Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD	
Must Use	DTM06	1251	Date Time Period	X AN 1/35
			Expression of a date, a time, or range of dates, times or dates and times	
			Time Period	

Segment: QTY Quantity (Transmission Contribution-NSPL)
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:

Electric: Required
 Gas: Not Used

Zero values may be sent if the utility is, in fact, stating that there is no contribution for this customer's account.

The QTY/DTM loop may be sent twice if the Utility is providing both the current NSPL and the NSPL that will be effective for a subsequent period.

For example, you may receive either two loops:

```
QTY~KZ~476~K1
DTM~007~~~~RD8~20120601-20130531
QTY~KZ~450~K1
DTM~007~~~~RD8~20120601-20130531
```

Or just one:

```
QTY~KZ~450~K1
DTM~007~~~~RD8~20120601-20130531
```

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity KZ Corrective Action Requests-Written Transmission Contribution: Customer's contribution to the Transmission System's annual peak load. Also known as Network Service Peak Load (NSPL).	M ID 2/2
Must Use	QTY02	380	Quantity Numeric value of quantity Transmission Contribution	X R 1/15
Must Use	QTY03	C001	Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	O
Must Use	C00101	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand KW	M ID 2/2

Segment: **DTM** **Date/Time Reference (NSPL Effective Date)**
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:

Electric: Required
 Gas: Not Used
 DTM~007~~~~RD8~20120601-20130531

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
Must Use	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 007 Effective NSPL Effective Date	M ID 3/3
Must Use	DTM05	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format RD8 Range of Dates Expressed in Format CCYYMMDD- CCYYMMDD	X ID 2/3
Must Use	DTM06	1251	Date Time Period Expression of a date, a time, or range of dates, times or dates and times Time period	X AN 1/35

Segment: **QTY** Quantity (Maximum Daily Contract Quantity (MDCQ))
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: Electric: Not Used
 Gas: Optional
 QTY~MX~60000

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity MX Maximum Number of Employees Maximum Daily Contract Quantity (MDCQ)	M ID 2/2
Must Use	QTY02	380	Quantity Numeric value of quantity MDCQ	X R 1/15
	QTY03	C001	Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	O
Must Use	C00101	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken TD Therms	M ID 2/2

Segment: **QTY** Quantity (Maximum Allowable Operating Pressure (MAOP))
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: Electric: Not Used
 Gas: Optional
 QTY~MO~61~64

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type of quantity	
			MO	Minimum Order Package Level
				Maximum Allowable Operating Pressure (MAOP)
Must Use	QTY02	380	Quantity	X R 1/15
			Numeric value of quantity	
			MAOP	
	QTY03	C001	Composite Unit of Measure	O
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			64	Pounds Per Square Inch Gauge

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~23~000000001

Data Element Summary

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

Example 1 – Historical Usage (HU)

ComEd Mass Market - Electric	ComEd Non-Mass Market - Electric
<p>ST*867*00001 BPT*52*86720180508064228430000*20180508*DD N1*8S*COMMONWEALTH EDISON CO*1*006929509 N1*SJ*SUPPLIER NAME*1*111111111 N1*8R*CUSTOMER NAME REF*12*1234567890*GROUPA PTD*SU REF*NH*R70*R70 REF*LO*23 REF*PTC**GROUPA QTY*QD*633*KH MEA**PRQ*633*KH***51 DTM*150*20160426 DTM*151*20160525 QTY*QD*818*KH MEA**PRQ*818*KH***51 DTM*150*20160525 DTM*151*20160624 ... eliminated 21 periods QTY*QD*293*KH MEA**PRQ*293*KH***51 DTM*150*20180322 DTM*151*20180420 PTD*FG REF*BF*17 QTY*KC*2.5477*K1 DTM*007****RD8*20170601-20180531 QTY*KZ*2.2166*K1 DTM*007****RD8*20180101-20181231 SE*113*00001</p>	<p>ST*867*00001 BPT*52*86720180509060827059999*20180509*DD N1*8S*COMMONWEALTH EDISON CO*1*006929509 N1*SJ*SUPPLIER NAME*9*11111111AAAA N1*8R*CUSTOMER NAME REF*12*1234567890*GROUPC PTD*SU REF*NH*R74*R74 REF*LO*29 REF*PTC**GROUPC QTY*QD*36306*KH MEA**PRQ*36306*KH***51 MEA**PRQ*78.62*K1***42 MEA**PRQ*88.99*K1***41 DTM*150*20160415 DTM*151*20160517 QTY*QD*38260*KH MEA**PRQ*38260*KH***51 MEA**PRQ*89.86*K1***42 MEA**PRQ*100.22*K1***41 DTM*150*20160517 DTM*151*20160616 ... eliminated 21 periods QTY*QD*37445*KH MEA**PRQ*37445*KH***51 MEA**PRQ*84.82*K1***42 MEA**PRQ*96.34*K1***41 DTM*150*20180315 DTM*151*20180413 PTD*FG REF*BF*12 QTY*KC*100.7815*K1 DTM*007****RD8*20170601-20180531 QTY*KZ*100.2505*K1 DTM*007****RD8*20180101-20181231 SE*161*00001</p>

Ameren Mass Market - Electric	Ameren Non-Mass Market - Electric
ST*867*0012 BPT*52*111112222201805083001*20180508*DD N1*8S*AMEREN ILLINOIS*1*006936017 N1*SJ*Supplier Name*1*111111111 N1*8R*CUSTOMER NAME REF*12*1111122222*GROUPA REF*LU*88888888 REF*SPL*RATE ZONE III PTD*SU***OZ*EL REF*NH*DS1*DS-1 Residential Delivery Serv REF*LO*RESDLL-IP REF*KX*AMI REF*AN*N QTY*QD*402*KH MEA*AA*PRQ*402*KH***51 DTM*150*20180326 DTM*151*20180425 QTY*QD*513*KH MEA*AA*PRQ*513*KH***51 DTM*150*20180225 DTM*151*20180326 ... eliminated 21 periods QTY*QD*211*KH MEA*AA*PRQ*211*KH***51 DTM*150*20160426 DTM*151*20160525 PTD*FG***OZ*EL REF*BF*01 QTY*KZ*1.943*K1 DTM*007****RD8*20170601-20180531 SE*114*0012	ST*867*0001 BPT*52*1048105002201310020002*20131002*DD N1*8S*AMEREN ILLINOIS*1*006936017 N1*SJ*Supplier*1*123456789 N1*8R*CUSTOMER NAME REF*11*1700001 REF*12*1048104997 REF*LU*10584061 REF*SPL*RATE ZONE III PTD*SU***OZ*EL REF*NH* DS2*DS - Small General Service (DS REF*LO*DS2HH- REF*KX*NOTAMI REF*AN*N QTY*QD*5400*KH MEA*AA*PRQ*5400*KH***51 DTM*150*20130630 DTM*151*20130731 QTY*QD*7220*KH MEA*AA*PRQ*7220*KH***51 DTM*150*20130531 DTM*151*20130630 ... eliminated 21 intervals QTY*QD*4857*KH MEA*AA*PRQ*4857*KH***51 DTM*150*20110930 DTM*151*20111031 PTD*FG***OZ*EL REF*BF*17 QTY*KZ*23.537*K1 DTM*007****RD8*20130601-20140531 SE*192*0001

Ameren Mass Market - Gas	Ameren Non-Mass Market - Gas
	ST*867*0001 BPT*52*1048105002201310020002*20131002*DD N1*8S*AMEREN ILLINOIS*1*006936017 N1*SJ*Supplier*1*123456789 N1*8R*CUSTOMER NAME REF*11*1700001 REF*12*1048104997 REF*LU*10584061 REF*SPL*RATE ZONE III PTD*SU***OZ*GAS REF*NH*GDS*GDS-4 Large Gen Gas QTY*QD*19400*TD MEA*AA*PRQ*19400*TD***51 DTM*150*20130630 DTM*151*20130731 QTY*QD*17220*TD MEA*AA*PRQ*17220*TD***51 DTM*150*20130531 DTM*151*20130630 ... eliminated 21 intervals QTY*QD*26840*TD MEA*AA*PRQ*26840*TD***51 DTM*150*20110930 DTM*151*20111031 PTD*FG***OZ*GAS REF*BF*01 QTY*MX*1356 QTY*MO*61 SE*191*0001

Example 2 – Historical Interval Usage (HIU)

Ameren - Electric	Ameren - Gas
<p>ST*867*0001 BPT*52*9730009914201309030999*20130903*C1 N1*8S*AMEREN ILLINOIS*1*006936017 N1*SJ*Supplier*1*123456789 N1*8R*CUSTOMER NAME REF*11*133650 REF*12*9730009999*NONPOR REF*LU*91674999 REF*SPL *RATE ZONE I PTD*SU REF*NH*DS4*DS - Lg General Svc (DS-4) 100 REF*LO*IDR REF*AN*N REF*KX*NOTAMI QTY*QD*380380*KH MEA*AA*PRQ*380380*KH***51 DTM*150*20130726 DTM*151*20130826 QTY*QD*397373*KH MEA*AA*PRQ*397373*KH***51 DTM*150*20130626 DTM*151*20130726 ... skipped 21 months QTY*QD*370444*KH MEA*AA*PRQ*370444*KH***51 DTM*150*20110825 DTM*151*20110926 PTD*BQ DTM*150*20130726 DTM*151*20130826 QTY*QD*23.1075*KH MEA**PRQ*23.1075*KH***51 MEA**PRQ*24.03*K1***51 DTM*582*20130727*0100 QTY*QD*22.7925*KH MEA**PRQ*22.7925*KH***51 MEA**PRQ*22.86*K1***51 DTM*582*20130727*0200 ... skipped intervals until the end of the day QTY*QD*23.4*KH MEA**PRQ*23.4*KH***51 MEA**PRQ*24.03*K1***51 DTM*582*20130727*2359 QTY*QD*22.5*KH MEA**PRQ*22.5*KH***51 MEA**PRQ*24.03*K1***51 DTM*582*20130728*0100 ... skipped intervals until the end of the 2 years QTY*QD*24.3*KH MEA**PRQ*24.3*KH***51 MEA**PRQ*25.2*K1***51 DTM*582*20110926*2359 PTD*FG REF*BF*02 QTY*KZ*1386.293*K1 DTM*007****RD8*20130601-20140531 SE*70461*0001</p>	

Example 3 – Historical Interval Usage with Net Metering & Community Solar - Ameren

PTD*SU***OZ*EL

REF*NH*DS1*DS-1 Residential Delivery Serv

REF*LO*RESDLH-CIPS

REF*KX*AMI

REF*AN*Y

REF*KY*NM-BI

QTY*QD*500*KH ← Consumption

MEA*AA*PRQ*500*KH***51

DTM*150*20180729

DTM*151*20180827

QTY*87*300*KH ← On-Site Generation

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

DTM*150*20180729

DTM*151*20180827

← Community Solar not present because customer quit program

QTY*QH*0*KH

← Starting Bank - Period 3 - Still shows even though 0
because there is on-site generation on the account

MEA*AF*PRQ*0*KH***51

DTM*150*20180729

DTM*151*20180827

QTY*QD*800*KH ← Consumption - Period 2

MEA*AA*PRQ*800*KH***51

DTM*150*20180627

DTM*151*20180729

QTY*87*0*KH

← On-Site Generation - Period 2 - Still shows even though 0
because there is active on-site generation on the account

MEA*AF*PRQ*0*KH***51

DTM*150*20180627

DTM*151*20180729

QTY*77*100*KH

← Community Solar - Period 2

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

DTM*150*20180627

DTM*151*20180729

QTY*QH*150*KH

← Starting Bank - Period 2

MEA*AA*PRQ*150*KH***51

DTM*150*20180627

DTM*151*20180729

QTY*QD*100*KH

← Consumption - Period 1

MEA*AA*PRQ*100*KH***51

DTM*150*20180529

DTM*151*20180627

QTY*87*150*KH

← On-Site Generation - Period 1

MEA*AF*PRQ*150*KH***51

DTM*150*20180529

DTM*151*20180627

QTY*77*100*KH

← Community Solar - Period 1

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

DTM*150*20180529

DTM*151*20180627

QTY*QH*0*KH

← Starting Bank - Period 1

MEA*AA*PRQ*0*KH***51

DTM*150*20180529

DTM*151*20180627