

**Pennsylvania
New Jersey
Delaware
Maryland**

Implementation Guideline

For

Electronic Data Interchange

TRANSACTION SET

867

**Historical Interval Usage
Ver/Rel 004010**

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	Summary of Changes
March 15, 2008 Version 0.1D	Initial Release for PSEG NJ Change Control.
August 20, 2008 Version 0.1.5D	Incorporate changes for PA
October 2, 2008 Version 0.1.6D	Remove PECO from PA Notes section
August 8, 2009 Version 0.1.7D	Incorporate PA Change Control 056 (PPL field use)
January 24, 2010 Version 1.0	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
November 4, 2010 Version 1.0.1D	Incorporated PA Change Control 065 (REF*LF and REF*SV) Incorporated PA Change Control 066 (FE HI Implementation) Incorporated PA Change Control 068 (PECO HI Implementation) Incorporated PA Change Control 073 (Update terminology of AMTKC to PLC and AMTKZ to NSPL)
February 28, 2011 Version 2.0	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
February 16, 2012 Version 2.01	Incorporated PA Change Control 075 (Update UOM codes in QTY03) Incorporated PA Change Control 077 (Add QTY01 Codes) Incorporated PA Change Control 078 (REF*11) Incorporated PA Change Control 080 (Clarify K1 in SU loop) Incorporated PA Change Control 082 (Add/update QTY01 Codes) Incorporated PA Change Control 085 (REF*KY) Incorporated PA Change Control 090 (REF03 in REF*KY) Incorporated PA Change Control 093 (admin updates)
March 8, 2013	<ul style="list-style-type: none"> • Moving to v6.0 to align versions across all transaction sets • Cleaned up references to Allegheny and APS throughout document • Incorporate PA Change Control 087 (add DTM segments to be used with QTY*KC and QTY*KZ to denote current and future values) • Incorporate PA Change Control 095 (REF03 in REF*KY) • Incorporate PA Change Control 101 (remove AMT*LD from request; rescinds CC 58) • Incorporate PA Change Control 102 (increase REF*BF length in Data Dictionary) • Incorporate PA Change Control 103 (uniform net metering consumption reporting) • Incorporate MD Change Control 015 (add 867HI support for Maryland)

General Notes

Use	<ul style="list-style-type: none"> • Historical Usage will be provided to an ESP upon Request. The request will be made using the 814E documents. • Historical Usage can be requested for an entity that is already a customer of the ESP • Historical Usage can be requested for any customer that has not restricted the release of their historical usage. This is state dependent, some states allow this scenario, and others do not. • The Historical Usage Transaction Set is sent by the LDC only one time per ESP request. No corrections or changes will be transmitted. The Historical Usage data is correct for the point in time that is it requested. Subsequent adjustments to Historical Usage will not be transmitted to the ESP. • If providing history totalized for an account, use "SU"/"BQ" (Summary) in PTD01, else if providing history by meter, use "BO"/"PM" (Physical Meter) in PTD01.
LDC Definitions:	<p>The term LDC (Local Distribution Company) in this document refers to the utility. Each state may refer to the utility by a different acronym:</p> <ul style="list-style-type: none"> • EDC – Electric Distribution Company (Pennsylvania, Delaware) • LDC – Local Distribution Company (New Jersey) • EC – Electric Company (Maryland)
ESP Definitions:	<p>The term ESP (Energy Service Provider) in this document refers to the supplier. Each state may refer to the supplier by a different acronym:</p> <ul style="list-style-type: none"> • EGS – Electric Generation Supplier (Pennsylvania) • TPS – Third Party Supplier (New Jersey) • ES – Electric Supplier (Delaware) • ES – Electricity Supplier (Maryland)
Renewable Energy Provider Definition:	<p>The term Renewable Energy Provider in this document refers to the party that provides Renewable Energy Credits (RECs). This party does not provide generation to the account. Each state may refer to the Renewable Energy Provider by a different acronym:</p> <ul style="list-style-type: none"> • GPM – Green Power Marketer (New Jersey) <p>Note: The transaction will either have an ESP or a Renewable Energy Provider, but not both.</p>

Pennsylvania Notes

<p>Use</p>	<ul style="list-style-type: none"> • Transaction is optional in Pennsylvania. • The EDC will provide interval detail at the lowest recorded level. The EGS will not be able to request a specific interval level. • EDC support of 867HI: <ul style="list-style-type: none"> • Duquesne – Does not support • First Energy (ME,PE,PP, & WPP)– Supports; utilizes account summary loops (SU & BQ) • PECO – Supports; utilizes account summary loops (SU & BQ). • PPL EU – Supports; utilizes account summary loops (SU & BQ) • UGI – Does not support
<p>Amount of HI data provided</p>	<ul style="list-style-type: none"> • The Pennsylvania default is 12 months of Historical Interval Usage, the following EDCs offer more than 12 months... <ul style="list-style-type: none"> ○ PECO – default is 24 months
<p>Implementation Information</p>	<ul style="list-style-type: none"> • PECO - For any HIU in which the data precedes the transaction implementation date, PECO is required to force the QTY*01 segment to “actual” because actual versus estimate data is not available for dates preceding the transaction implementation date. All readings provided are used for billing purposes regardless of the value in this segment.
<p>Requirements for uniform support of Net Metered Customers:</p>	<p>Account Level – both the SU and BQ loops are sent. Supported by FE, PECO, and PPL. N/A to UGI as they do not have Interval Metered accounts. DLCO does not support the 867HI but plans to do so in January 2014.</p> <ul style="list-style-type: none"> • SU (Account Services Summary) Loop –reports consumption summarized/totalized for account by unit of measure for net metered customers. Individual intervals are not reported in the PTD*SU loop. <ol style="list-style-type: none"> 1. When the customer’s consumption is greater than generation for a given service period, the KH will be reported as net consumption (QTY01 w/actual = QD or estimated = KA) with the total generation subtracted from total consumption. 2. When the customer’s generation is greater than consumption for a given service period, the KH will be reported as net generation (actual = 87 or estimated = 9H) with the total consumption subtracted from total generation). 3. In either scenario, the QTY02 will never be signed negative. • BQ (Account Services Detail) Loop – reports consumption provided by meter summed to the account level by unit of measure. This will be looped for each month for which the history is being reported. <ol style="list-style-type: none"> 1. The QTY02 will report the net KH for ALL metered services being summed to the account level for the given reporting period. 2. When the net KH for a given report period is generation, the QTY01 will be either ‘87’ or ‘9H’ to denote net generation. 3. When the net KH for a given report period is consumption, the QYT01 will be one of the six valid consumption quantity qualifiers. <p>Meter Level – none of the PA EDCs are reporting Historical Interval usage at the meter level in the EDI 867HI EDEWG may add requirements/examples should any EDC wish to send meter level consumption history in the 867HI.</p>

New Jersey Notes

- Use
- Transaction is optional in New Jersey.

Delaware Notes

- Use
- Transaction is not used in Delaware

Maryland Notes

- Use
- Maryland EDI Change Control 15 added support of the EDI 867 Historical Interval usage transaction for Maryland. As of 1/28/13 the exact utility implementation dates and looping have yet to be completely finalized:
 - Delmarva / PEPCO – will support in new CIS tentatively scheduled for go live in 3Q 2014. For non-EDI HI requests, the supplier should contact supplier support.
 - BGE – support of 867HI tentatively scheduled for a date to be determined in 4Q 2013.
 - Potomac Edison – support of 867HI estimated for 3Q/4Q 2013 and will be at the account level only.

How to Use the Implementation Guideline

Segment: **REF** Reference Identification
Position: 030
Loop: LIN
Level: Detail
Usage: Optional
Max Use: >1
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.

This section is used to show the X12 Rules for this segment. You must look further into the grayboxes below for State Rules.

Notes:	Recommended by UIG
PA Use:	Must be identical to account number as it appears on the customer's bill, excluding punctuation (spaces, dashes, etc.). Significant leading and trailing zeros must be included.
	Request: Required Accept Response: Required Reject Response: Required
NJ Use:	Same as PA
Example:	REF*12*2931839200

The "Notes:" section generally contains notes by the Utility Industry Group (UIG).

This section is used to show the individual State's Rules for implementation of this segment.

One or more examples.

Data Element Summary

Ref. Des.	Data Element	Name	X12 Attributes
Must Use REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
	12	Billing Account LDC assigned account number for end use customer.	
Must Use REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

This column shows the use of each data element. If state rules differ, this will show "Conditional" and the conditions will be explained in the appropriate grayboxes.

These are X12 code descriptions, which often do not relate to the information we are trying to send. Unfortunately, X12 cannot keep up with our code needs so we often change the meanings of existing codes. See graybox for the UIG or state definitions.

This column shows the X12 attributes for each data element. Please refer to Data Dictionary for individual state rules.

M = Mandatory, O= Optional, X = Conditional

AN = Alphanumeric, N# = Decimal value, ID = Identification, R = Real

1/30 = Minimum 1, Maximum 30

867 Historical Usage X12 Structure

Functional Group ID=**PT**

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>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BPT	Beginning Segment for Product Transfer and Resale	M	1		
			LOOP ID - N1			5	
	080	N1	Name	O	1		
	120	REF	Reference Identification	O	12		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - PTD			>1	
Must 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			>1	
	110	QTY	Quantity	O	1		
	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>
Must Use	030	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

Data Dictionary for 867 Historical Interval Usage

<i>Appl Field</i>	<i>Field Name</i>	<i>Description</i>	<i>EDI Element</i>	<i>Loop / Related EDI Qualifier</i>	<i>Data Type</i>
1	Purpose Code	Transaction Set Purpose	BPT01 = 52		X(2)
2	Transaction Reference Number	Unique Number identifying this transaction.	BPT02		X(30)
3	System Date	Date this transaction was generated from sender's system	BPT03		9(8)
4	Report Type Code	Code to identify this transaction contains detailed usage information	BPT04 = DD	BPT01 = 52	X(2)
5	LDC Name	LDC's Name	N102	N1: N101 = 8S	X(60)
6	LDC Duns	LDC's DUNS Number or DUNS+4 Number	N104	N1: N101 = 8S N103 = 1 or 9	X(13)
7	ESP Name	ESP's Name	N102	N1: N101 = SJ	X(60)
8	ESP Duns	ESP's DUNS Number or DUNS+4 Number	N104	N1: N101 = SJ N103 = 1 or 9	X(13)
8.3	Renewable Energy Provider Name	Renewable Energy Provider 's Name	N102	N1: N101 = G7	X(60)
8.4	Renewable Energy Provider Duns	Renewable Energy Provider 's DUNS Number or DUNS+4 Number	N104	N1: N101 = G7 N103 = 1 or 9	X(13)
9	Customer Name	Customer Name	N102	N1: N101 = 8R	X(60)
10	ESP Account Number	ESP Customer Account Number	REF02	N1: N101 = 8R REF01 = 11	X(30)
11	LDC Account Number	LDC Customer Account Number	REF02	N1: N101 = 8R REF01 = 12	X(30)
12	Old Account Number	Previous LDC Customer Account Number	REF02	N1: N101 = 8R REF01 = 45	X(30)
<u>PTD Loop for Historical Interval Usage Summarized by Account (PTD01 = SU)</u>					
A PTD Loop will be provided for each type of consumption measured for y meter (PTD01 = SU) in addition to the detail PTD loop for the meter and the PTD loop that provides Scheduling Determinants when appropriate					
13	Loop Identification	Indicates if usage is provided totalized or by meter.	PTD01 = SU		X(2)
14.2	Service Period Start	Start date of the period for which these readings are provided	DTM02	DTM01 = 150	X(8)
14.5	Service Period End	End date of the period for which these readings are provided	DTM02	DTM01 = 151	X(8)
16.2	Quantity Qualifier	Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered 87 = Actual Quantity Received (Net Meter) 9H = Estimated Quantity Received (Net Meter)	QTY01		X(2)
16.4	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02	QTY01	9(15)
16.6	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)

PTD Loop for Historical Interval Usage that is provided at Account Level (PTD01 = BQ)

A PTD Loop will be provided for each type of consumption measured (PTD01 = BQ) in addition to the PTD loop that provides Scheduling Determinants when appropriate

21	Loop Identification	Indicates if usage is provided totalized or by meter.	PTD01 = BQ		X(2)
22.1	Service Period Begin Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = 150	9(8)
22.3	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = 151	9(8)
24	Meter Type	Code indicating type of consumption measured & interval at which measurements are taken.	REF02	PTD: REF01 = MT	X(5)
25	Quantity Qualifier	Represents whether the quantity is actual or estimated: 17 = Incomplete Quantity Delivered 19 = Incomplete Quantity Received (Net Meter) 20 = Unavailable 87 = Actual Quantity Received (Net Meter) 96 = Non-Billable Quantity 9H = Estimated Quantity Received (Net Meter) KA = Estimated Quantity Delivered QD = Actual Quantity Delivered	QTY01		X(2)
27	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02	QTY01	9(15)
28	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)
29	Report Period Date/Time	The date/time of the end of the interval.	DTM02 (CCYYMMDD) and DTM03 (HHMM)	QTY: DTM01 = 582	DTM02= 9(8) and DTM03= 9(4)
29.1	Time Code	The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. ED = Eastern Daylight Time ES = Eastern Standard Time	DTM04		X(2)

PTD Loop for Scheduling Determinants (PTD01 = FG)

This PTD provides Scheduling Determinants when appropriate

30	Loop Identification	Indicates if usage is provided totalized or by meter.	PTD01 = FG		X(2)
31	Loss Factor	Loss Factor	REF02	PTD:REF01= LF	X(30)
32	Profile Group	A code for the Load Profile used for this customer. Differs by LDC. Codes posted on LDC's Web site.	REF02	PTD: REF01= LO	X(30)

33	LDC Rate Code	Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site	REF02	PTD: REF01= NH	X(30)
34	LDC Billing Cycle	LDC Cycle on which the bill will be rendered	REF02	PTD: REF01= BF	X(4)
35	Service Voltage	Service voltage	REF02	NM1:REF01= SV	X(30)
36	Special Meter Configuration Code	Used to convey there's a special meter present on the account. For example, Net Metering	REF02	LIN: REF01 = KY	X(3)
37	Special Meter Configuration Information	PPLEU-used to report the max K1 (demand) the special meter supports	REF03	LIN: RF01 = KY	X(80)
38	Peak Load Contribution (PLC)	Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM Peak).	QTY02	PTD: QTY01 = KC	9(15)
39	Unit of Measure	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03 = K1	PTD: QTY01 = QD	X(2)
40	Network Service Peak Load	Customer's peak load contribution provided to PJM for the Transmission Service calculation (coincident with LDC peak).	QTY02	PTD: QTY01 = KZ	9(15)
41	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03 = K1	PTD: QTY01 = QD	X(2)

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:

PA Use:	Required
NJ Use:	Optional
DE Use:	Not Used
MD Use:	Same as PA; see Notes section for utility support
Example:	ST*867*000000001

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
Must Use	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set	M ID 3/3
			867 Product Transfer and Resale Report	
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:

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	BPT*52*2008070112300001*20080701*C1

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</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 all time.	O AN 1/30
Must Use	BPT03	373	Date Date (CCYYMMDD) The transaction creation date – the date that the data was processed by the 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 Interval Data	O ID 2/2

Segment: **N1** Name (8S=LDC Name)
Position: 080
Loop: N1
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.

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	N1*8S*LDC COMPANY*1*007909411

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 8S Consumer Service Provider (CSP) LDC	M ID 2/3
Must Use	N102	93	Name Free-form name LDC Company 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 LDC D-U-N-S Number or D-U-N-S + 4 Number	X AN 2/20

Segment: **N1** Name (SJ=ESP Name)
Position: 080
Loop: N1
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.

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	N1*SJ*ESP COMPANY*9*007909422ESP1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual SJ Service Provider ESP	M ID 2/3
Must Use	N102	93	Name Free-form name ESP Company 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 ESP D-U-N-S Number or D-U-N-S + 4 Number	X AN 2/20

Segment: **N1** Name (G7=Renewable Energy Provider Name)
Position: 080
Loop: N1
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.

PA Use:	Not Used
NJ Use:	Required if sent and for Renewable Energy program, see New Jersey Notes section for utility support
DE Use:	N/A
MD Use:	N/A
Example:	N1*G7*RENEWABLE COMPANY*9*007909422GPM

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual G7 Entity Providing the Service Renewable Energy Provider	M ID 2/3
Must Use	N102	93	Name Free-form name Renewable Energy Provider Company 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 Renewable Energy Provider D-U-N-S Number or D-U-N-S + 4 Number	X AN 2/20

Segment: **N1** Name (8R=Customer Name)
Position: 080
Loop: N1
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.

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	Same as PA; see Notes section for utility support
MD Use:	Same as PA; see Notes section for utility support
Example:	N1*8R*JANE DOE

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
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 End Use Customer	M ID 2/3
Must Use	N102	93	Name Free-form name Customer Name as it appears on the customer's bill	X AN 1/60

Segment: **REF** Reference Identification (11=ESP Account Number)
Position: 120
Loop: N1
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:

PA Use:	Optional if it was previously provided on an 814 to the LDC and the ESP is the supplier of record.
NJ Use:	N/A
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*11*8645835

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 ESP-assigned account number for end use customer.	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	X AN 1/30

Segment: REF Reference Identification (12=LDC Account Number)

- Position:** 120
- Loop:** N1
- 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:**

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support- Must be identical to account number as it appears on the customer's bill, excluding punctuation (spaces, dashes, etc.). Significant leading and trailing zeros must be included.
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*12*519703123457

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 LDC-assigned account number for end use customer.	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	X AN 1/30

Segment: **REF** Reference Identification (45=LDC Old Account Number)
Position: 120
Loop: N1
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:

PA Use:	Required if account number changed in the last 60 days.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*45*451105687500

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 45 Old Account Number LDC's previous account number for the end use customer.	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	X AN 1/30

Segment: **PTD** Product Transfer and Resale Detail (SU= Interval Summary-Account)
Position: 010
Loop: PTD
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 when providing Historical Interval Usage by account. The PTD*SU Loop sums the intervals for the month by unit of measure for each bill period. Demand is optional in the PTD*SU loop. Individual intervals are not reported in the PTD*SU Loop. One PTD*SU loop is required for each unit of measure for each bill period.
PA Use:	Required if sending HI summed to the account level
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Examples:	PTD*SU

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer	M ID 2/2
			SU Designated Items Account Services Summary	

Segment: QTY Quantity
Position: 110
Loop: QTY
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:	Each QTY/MEA/DTM loop conveys consumption information about one interval.
PA Use:	Required if providing Historical Usage by Account; otherwise, not used. Each QTY/MEA/DTM loop conveys consumption information about one bill period. Note: For an interval account, this provides the net total usage for the bill period.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	QTY*QD*5210*KH

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier Code specifying the type of quantity	M ID 2/2
			KA Estimated Used when Quantity in QTY02 is Estimated	
			QD Quantity Delivered Used when Quantity in QTY02 is Actual	
			87 Quantity Received Quantity Received from customer in a Co-generation environment	
			9H Estimated Duration The quantity received shown is an estimated quantity in a Co-generation environment	
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	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) Represents potential power load measured at predetermined intervals	
			K2 Kilovolt Amperes Reactive Demand (kVAR) Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter	
			K3 Kilovolt Amperes Reactive Hour (kVARH) Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	
			K4 Kilovolt Amperes (KVA)	
			KH Kilowatt Hour	

Segment: **DTM** Date/Time Reference (150=Service Period Start)
Position: 210
Loop: QTY
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:	This date reflects the beginning of the date range for this account for this billing period.
PA Use:	Required.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*150*20080101

Data Element Summary

	Ref.	Data	Attributes
	Des.	Element Name	
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 (151=Service Period End)

Position: 210

Loop: QTY

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:	This date reflects the end of the date range for this account for this billing period.
PA Use:	Required.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*151*20080131

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: **PTD** Product Transfer and Resale Detail (BQ=Account Services Detail)
Position: 010
Loop: PTD
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 when providing Historical Interval Usage by account. There must be one loop for each unit of measurement.
PA Use:	Required if sending HI summed to the account level
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see notes section for utility support
Examples:	PTD*BQ

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer BQ Other	M ID 2/2
			Account Services Detail Issue from inventory, when a specific reason type is not otherwise provided Consumption Provided by Meter by unit of measure.	

Segment: **DTM** Date/Time Reference (150=Service Period Start)
Position: 020
Loop: PTD
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:	This date reflects the beginning of the date range for this account for this billing period.
PA Use:	Required.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*150*20080101

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 (151=Service Period End)

Position: 020
Loop: PTD
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:	This date reflects the end of the date range for this account for this billing period.
PA Use:	Required.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*151*20080131

Data Element Summary

	Ref.	Data	Attributes
	Des.	Element Name	
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: REF Reference Identification (MT=Meter Type)

- Position:** 030
- Loop:** PTD
- 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:**

PA Use:	Required if providing Historical Interval Usage by account; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*MT*KH060

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification MT Meter Type	M ID 2/3
Billing Data Types and Interval Frequencies				
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier When REF01 is MT, the meter type is expressed as a five-character field. The first two characters are the type of consumption, the last three characters are the metering interval. "COMBO" is used for a meter that records more than one measurement. Valid values can be a combination of the following values:	X AN 1/30

Type of Consumption

K1	Kilowatt Demand
K2	Kilovolt Amperes Reactive Demand
K3	Kilovolt Amperes Reactive Hour
K4	Kilovolt Amperes
K5	Kilovolt Amperes Reactive
KH	Kilowatt Hour
T9	Thousand Kilowatt Hours

Metering Interval

Nnn	Number of minutes from 001 to 999
ANN	Annual
BIA	Bi-annual
BIM	Bi-monthly
DAY	Daily
MON	Monthly
QTR	Quarterly

For Example:

KHMON	Kilowatt Hours Per Month
K1015	Kilowatt Demand per 15 minute interval

Other Valid Codes

COMBO	This code is used to indicate that the meter has multiple measurements, e.g., one meter that measures both kWh and Demand.
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Segment: QTY Quantity
Position: 110
Loop: QTY
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:	Each QTY/MEA/DTM loop conveys consumption information about one metering interval.
PA Use:	Required if providing Historical Interval Usage by account; otherwise, not used. Note: For a net metered account, the "net usage" is provided.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	QTY*QD*5210*KH

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
			17 Incomplete Quantity Delivered Used when multi-metered account rolled up and at least one of the meters is not available.	
			19 Incomplete Quantity Received (Net Metering) Used when multi-metered account rolled up, at least one of the meters is not available and the total is net generation.	
			20 Unavailable Used when meter data is not available to fill the intervals.	
			87 Actual Quantity Received (Net Metering) Used when the net generation quantity received is actual.	
			96 Non-Billable Quantity Indicates this quantity and interval are outside of the actual bill period	
			9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated.	
			KA Estimated Quantity Delivered Used when the quantity delivered is an estimated quantity.	
			QD Actual Quantity Delivered Used when the quantity delivered is an actual quantity.	
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	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)	

	Represents potential power load measured at predetermined intervals
K2	Kilovolt Amperes Reactive Demand (kVAR)
	Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter
K3	Kilovolt Amperes Reactive Hour (kVARH)
	Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
K4	Kilovolt Amperes (KVA)
KH	Kilowatt Hour

Segment: **DTM** Date/Time Reference (582=Report Report)
Position: 210
Loop: QTY
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.
 3 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.
PA Use:	Required.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*582*20080115*1500*ET

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 582 Report Period The date/time of the end of the interval.	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8
Must Use	DTM03	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) HHMM format	X TM 4/8
Must Use	DTM04	623	Time Code Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. If meter is not adjusted for daylight savings time, the time code will always reflect Eastern Daylight Time which will be interpreted as prevailing time. ED Eastern Daylight Time ES Eastern Standard Time	O ID 2/2

Segment: **PTD** Product Transfer and Resale Detail (BO= Interval Summary)
Position: 010
Loop: PTD
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 when providing Historical Interval Usage by meter. The PTD*BO Loops sum the intervals for the month by unit of measure for each meter. In the PTD*BO consumption across intervals and across the same unit of measure is summarized at the meter level by meter cycle reporting period. Demand is never reported in the PTD*BO Loop. Individual intervals are not reported in the PTD01=BO Loop. One PTD*BO loop is required for each meter for each unit of measure. There will be on PTD*BO loop for each month.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Examples:	PTD*BO***MG*87876567

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer BO Designated Items Meter Services Interval Summary	M ID 2/2
Must Use	PTD04	128	Reference Identification Qualifier Code qualifying the Reference Identification MG Meter Number	X ID 2/3
Must Use	PTD05	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Number Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.	X AN 1/30

Segment: **DTM** Date/Time Reference (150=Service Period Start)
Position: 020
Loop: PTD
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:	This date reflects the beginning of the date range for this meter for this billing period. This specific PTD loop is required if there are metered services on the account. Required, unless a "DTM*514" is substituted for this code.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*150*20080101

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 (151=Service Period End)

Position: 020
Loop: PTD
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:	This date reflects the end of the date range for this meter for this billing period. This specific PTD loop is required if there are metered services on the account. Required, unless a "DTM*514" is substituted for this code.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*151*20080131

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: **DTM** Date/Time Reference (514=Meter Exchange Date)

- Position:** 020
- Loop:** PTD
- 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:	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. Required when a meter is changed and the meter agent does not change.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	Date Range in the first PTD is shown as: DTM*150*20080201 DTM*514*20080214 Date Range in the second PTD is shown as: DTM*514*20080214 DTM*151*20080228

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 514 Transferred Exchanged meter read date	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8

Segment: QTY Quantity
Position: 110
Loop: QTY
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:	Each QTY/MEA/DTM loop conveys consumption information about one metering interval.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	QTY*QD*5210*KH

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 Quantity Delivered Used when the quantity delivered is an estimated quantity.	
			QD Actual Quantity Delivered Used when the quantity delivered is an actual quantity.	
			87 Actual Quantity Received (Net Metering) Used when the net generation quantity received is actual.	
			9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated.	
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	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) Represents potential power load measured at predetermined intervals	
			K2 Kilovolt Amperes Reactive Demand (kVAR) Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter	
			K3 Kilovolt Amperes Reactive Hour (kVARH) Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	
			K4 Kilovolt Amperes (KVA)	
			KH Kilowatt Hour	

Segment: **PTD** Product Transfer and Resale Detail (PM=Meter Detail)
Position: 010
Loop: PTD
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 when providing Historical Interval Usage by meter. There must be one loop for each unit of measurement for each meter.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Examples:	PTD*PM

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer	M ID 2/2
			PM Physical Meter Information Consumption Provided by Meter by unit of measure.	

Segment: **DTM** Date/Time Reference (150=Service Period Start)
Position: 020
Loop: PTD
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:	This date reflects the beginning of the date range for this meter for this billing period. This specific PTD loop is required if there are metered services on the account.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter or unless a "DTM*514" is substituted for this code, otherwise not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*150*20080101

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 (151=Service Period End)

Position: 020

Loop: PTD

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:	This date reflects the end of the date range for this meter for this billing period. This specific PTD loop is required if there are metered services on the account.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter or unless a "DTM*514" is substituted for this code, otherwise not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*151*20080131

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: **DTM** Date/Time Reference (514=Meter Exchange Date)
Position: 020
Loop: PTD
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:	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.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter and when a meter is changed and the meter agent does not change, otherwise not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	Date Range in the first PTD is shown as: DTM*150*20080201 DTM*514*20080214 Date Range in the second PTD is shown as: DTM*514*20080214 DTM*151*20080228

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 514 Transferred Exchanged meter read date	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8

Segment: **REF** Reference Identification (MG=Meter Number)
Position: 030
Loop: PTD
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:

PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*MG*87876567

Data Element Summary

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

Segment: **REF** Reference Identification (MT=Meter Type)
Position: 030
Loop: PTD
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:

PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*MT*KHMON

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification MT Meter Type	M ID 2/3
Billing Data Types and Interval Frequencies				
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier When REF01 is MT, the meter type is expressed as a five-character field. The first two characters are the type of consumption, the last three characters are the metering interval. "COMBO" is used for a meter that records more than one measurement. Valid values can be a combination of the following values:	X AN 1/30

Type of Consumption

K1 Kilowatt Demand
 K2 Kilovolt Amperes Reactive Demand
 K3 Kilovolt Amperes Reactive Hour
 K4 Kilovolt Amperes
 K5 Kilovolt Amperes Reactive
 KH Kilowatt Hour
 T9 Thousand Kilowatt Hours

Metering Interval

Nnn Number of minutes from 001 to 999
 ANN Annual
 BIA Bi-annual
 BIM Bi-monthly
 DAY Daily
 MON Monthly
 QTR Quarterly

For Example:

KHMON Kilowatt Hours Per Month
 K1015 Kilowatt Demand per 15 minute interval

Other Valid Codes

COMBO This code is used to indicate that the meter has multiple measurements, e.g., one meter that measures both kWh and Demand.

Segment: **REF** Reference Identification (NH=LDC Rate Class)
Position: 030
Loop: PTD
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:

PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*NH*GS1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification NH LDC Rate Code	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	X AN 1/30

Segment: QTY Quantity
Position: 110
Loop: QTY
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:	Each QTY/MEA/DTM loop conveys consumption information about one metering interval.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	QTY*QD*5210*KH

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 Quantity Delivered Used when the quantity delivered is an estimated quantity.	
			QD Actual Quantity Delivered Used when the quantity delivered is an actual quantity.	
			87 Actual Quantity Received (Net Metering) Used when the net generation quantity received is actual.	
			9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated.	
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	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) Represents potential power load measured at predetermined intervals	
			K2 Kilovolt Amperes Reactive Demand (kVAR) Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter	
			K3 Kilovolt Amperes Reactive Hour (kVARH) Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	
			K4 Kilovolt Amperes (KVA)	
			KH Kilowatt Hour	

Segment: **DTM** Date/Time Reference (582=Report Report)

Position: 210

Loop: QTY

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.

4 If DTM04 is present, then DTM03 is required.

4 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.
PA Use:	Optional - Required if providing Historical Interval Usage by Meter; otherwise, not used.
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	DTM*582*20080115*1500*ET

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 582 Report Period The date/time of the end of the interval.	M ID 3/3
Must Use	DTM02	373	Date Date expressed as CCYYMMDD	X DT 8/8
Must Use	DTM03	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) HHMM format	X TM 4/8
Must Use	DTM04	623	Time Code Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. If meter is not adjusted for daylight savings time, the time code will always reflect Eastern Daylight Time which will be interpreted as prevailing time. ED Eastern Daylight Time ES Eastern Standard Time	O ID 2/2

Segment: **PTD** Product Transfer and Resale Detail (FG=Scheduling Determinants)
Position: 010
Loop: PTD
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 (a.k.a. Load Responsibility) and Transmission Obligation for PJM customers.
PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Examples:	PTD*FG

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer	M ID 2/2
			FG	Flowing Gas Information Scheduling Determinants: This loop will provide information required by PJM.

Segment: **REF** Reference Identification (LF=Loss Factor)
Position: 030
Loop: PTD
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:

PA Use:	Required for First Energy Companies; Optional for others
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	Not Used
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*LF*2

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			LF Load Planning Number Loss Factor	
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

Segment: **REF** Reference Identification (LO=Load Profile)
Position: 030
Loop: PTD
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:

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*LO*GS

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
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	X AN 1/30

Segment: **REF** Reference Identification (NH=LDC Rate Class)
Position: 030
Loop: PTD
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:

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*NH*GS1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification NH LDC Rate Code	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	X AN 1/30

Segment: **REF** Reference Identification (BF=LDC Bill Cycle)
Position: 030
Loop: PTD
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:

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*BF*15

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification BF LDC 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	X AN 1/30

Segment: **REF** Reference Identification (SV=Service Voltage)
Position: 030
Loop: PTD
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:

PA Use:	Required for First Energy Companies; Optional for others
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	Not Used
MD Use:	Same as PA; see Notes section for utility support
Example:	REF*SV*SECONDARY

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	M ID 2/3
			SV Service Voltage	
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30
			PRIMARY SECONDARY Actual service voltage transmission value (Ex: 34.5kV)	

Segment: **REF** Reference Identification (KY=Special Meter Configuration)
Position: 030
Loop: PTD
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:

PA Use:	Required when special meter configuration is present on an account. PPLEU: supports First Energy & PECO: must support NLT 6/19/2013 Duquesne: will support NLT 1/31/2014
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*KY* NSUN*0000026

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
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 ASUN Net Metering Solar AWIN Net Metering Wind AHYD Net Metering Hydro ABIO Net Metering Biomass AWST Net Metering Waste ACHP Net Metering Combined Heat and Power AMLT Net Metering Multiple Different Sources NSUN Non-Net Metering Solar NWIN Non-Net Metering Wind NHYD Non-Net Metering Hydro NBIO Non-Net Metering Biomass NWST Non-Net Metering Waste NCHP Non-Net Metering Combined Heat and Power NFOS Non-Net Metering Fossil Fuel NMLT Non-Net Metering Multiple Different Sources NETMETER Net Meter (Used for EDCs who will not report the specific type of net meter)	X AN 1/30
Optional	REF03	352	Description A free-form description to clarify the related data elements and their content PPLEU: Used for the output rating of the generation equipment reporting in KW and reflects the maximum generation the equipment can produce at any one time	X AN 1/80

Segment: QTY Quantity (KC=Peak Load Contribution)
Position: 110
Loop: QTY
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:	Each QTY/MEA/DTM loop conveys consumption information about one metering period.
PA Use:	<p>Required - The QTY/DTM loop may be sent twice depending on the time of year the Historical Usage is being provided. (PLC is effective June 1 - May 31) One iteration will show the current PLC and a second iteration will show the PLC that will be effective in the period defined in the DTM segment. Currently the PA EDCs change the PLC effective June 1st. Once the EDCs are aware of what the next effective PLC will be (typically in December) they should begin providing it on transactions.</p> <p>For example, in February 2010 the PLC values would be reported as: QTY*KC*476*K1 DTM*007****RD8*20090601-20100531 QTY*KC*450*K1 DTM*007****RD8*20100601-20110531</p> <p>Whereas in September 2010 the PLC value would include only one loop because the following year's PLC is undetermined: QTY*KC*450*K1 DTM*007****RD8*20100601-20110531</p>
NJ Use:	<p>Required for PJM participants; see Notes section for utility support. This will be the Peak Load Contribution in effect when the transaction is requested. NJ Note: PSE&G sends Capacity Obligation to PJM.</p>
DE Use:	N/A
MD Use:	Required for PJM participants; see Notes section for utility support
Example:	QTY*KC*752*K1

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 Contribution: 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	X R 1/15
Must Use	QTY03	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 Represents potential power load measured at predetermined intervals	M ID 2/2

Segment: **DTM** Date/Time Reference (007=PLC Effective Date)
Position: 210
Loop: QTY
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:

PA Use:	<p>Required for PJM Participants</p> <p>The QTY/DTM loop may be sent twice depending on the time of year the Historical Usage is being provided. (PLC is effective June 1 - May 31) One iteration will show the current PLC and a second iteration will show the PLC that will be effective in the period defined in the DTM segment. Currently the PA EDCs change the PLC effective June 1st. Once the EDCs are aware of what the next effective PLC will be (typically in December) they should begin providing it on transactions.</p> <p>For example, in February 2010 the PLC values would be reported as: QTY*KC*476*K1 DTM*007****RD8*20090601-20100531 QTY*KC*450*K1 DTM*007****RD8*20100601-20110531</p> <p>Whereas in September 2010 the PLC value would include only one loop because the following year's PLC is undetermined: QTY*KC*450*K1 DTM*007****RD8*20100601-20110531</p>
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*007****RD8*20070601-20080531

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 007 Effective PLC 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 Expressed as CCYYMMDD-CCYYMMDD	X AN 1/35

Segment: QTY Quantity (KZ=Network Service Peak Load)
Position: 110
Loop: QTY
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:	Each QTY/MEA/DTM loop conveys consumption information about one metering interval.
PA Use:	Required - The QTY/DTM loop may be sent twice when the Utility is providing both the current NSPL and the NSPL that will be effective for a subsequent period. This will occur for short period of time between when the future value is sent via the 814C and the actual date the future value takes effect. For example, you may receive either two loops: QTY*KZ*476*K1 DTM*007****RD8*20100101-20101231 QTY*KZ*450*K1 DTM*007****RD8*20110101-20111231 Or just one: QTY*KZ*450*K1 DTM*007****RD8*20110101-20111231
NJ Use:	Required for PJM participants; see Notes section for utility support. This will be the Network Service Peak Load in effect when the transaction is requested. NJ Note: PSE&G sends Capacity Obligation to PJM.
DE Use:	N/A
MD Use:	Required for PJM participants, see Notes section for utility support
Example:	QTY*KZ*752*K1

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 Network Service Peak Load: Customer's peak load contribution provided to PJM for the Transmission Service calculation (coincident with LDC peak).	M ID 2/2
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	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 Represents potential power load measured at predetermined intervals	M ID 2/2

Segment: **DTM** Date/Time Reference (007=NSPL Effective Date)
Position: 210
Loop: QTY
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:

PA Use:	Required for PJM Participants NSPL is for January 1 - December 31 The QTY/DTM loop may be sent twice when the Utility is providing both the current NSPL and the NSPL that will be effective for a subsequent period. This will occur for short period of time between when the future value is sent via the 814C and the effective date of the future value. For example, you may receive either two loops: QTY*KZ*476*K1 DTM*007****RD8*20100101-20101231 QTY*KZ*450*K1 DTM*007****RD8*20110101-20111231 Or just one: QTY*KZ*450*K1 DTM*007****RD8*20110101-20111231
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*007****RD8*20070601-20080531

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 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 Expressed as CCYYMMDD-CCYYMMDD	X AN 1/35

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.

PA Use:	Required
NJ Use:	Same as PA; see Notes section for utility support
DE Use:	N/A
MD Use:	Same as PA; see Notes section for utility support
Example:	SE*23*00000001

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M N0 1/10
Must Use	SE02	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

Example: Historical Interval Usage by Account

Heading:

BPT*52*2008070112300001*20080701*C1	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 2008070112300001 , Transaction Date: 20080701 , Report Type Code: C1 , <i>Interval Usage</i>
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*JANE DOE	Customer name
REF*12*519703123457	LDC Account Number
REF*45*451105687500	Old LDC Account Number

Detail:

Segment Contents	Element Description
PTD*SU	Summary Loop for kwh (QTY, DTM, DTM for each month)
QTY*QD*52110*KH	Quantity (kwh)
DTM*150*20080529	Service Period Start
DTM*151*20080630	Service Period End
QTY*QD*34510*KH	Quantity (kwh)
DTM*150*20080701	Service Period Start
DTM*151*20080731	Service Period End

PTD*BQ	Summary loop for energy (one for each month)
DTM*150*20080529	Service Period Start
DTM*151*20080630	Service Period End
REF*MT*KH060	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20080529*0100*ED	End date and time of the period for which the quantity is provided.
QTY*QD*128*KH	Consumption
DTM*582*20080529*0200*ED	End date and time of the period for which the quantity is provided.
QTY*QD*216*KH	Consumption
DTM*582*20080529*0300*ED	End date and time of the period for which the quantity is provided.
....Continued on until the end of the period specified below	
QTY*QD*789*KH	Consumption
DTM*582*20080630*2300*ED	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20080630*2359*ED	End date and time of the period for which the quantity is provided.

PTD*BQ	Summary loop for energy (one for each month)
DTM*150*20080701	Service Period Start
DTM*151*20080731	Service Period End
REF*MT*KH060	Meter Type
QTY*87*102*KH	Consumption – Example shows net generation of 102 kwh
DTM*582*20080701*0100*ED	End date and time of the period for which the quantity is provided.
QTY*QD*233*KH	Consumption
DTM*582*20080701*0200*ED	End date and time of the period for which the quantity is provided.
QTY*QD*416*KH	Consumption
DTM*582*20080701*0300*ED	End date and time of the period for which the quantity is provided.
....Continued on until the end of the period specified below	
QTY*QD*781*KH	Consumption
DTM*582*20080731*2300*ED	End date and time of the period for which the quantity is provided.
QTY*QD*700*KH	Consumption
DTM*582*20080731*2359*ED	End date and time of the period for which the quantity is provided.

PTD*FG	Scheduling Determinants Loop
REF*LO*RS	Load Profile [Optional segment]
REF*NH*RESNH	LDC Rate Code
REF*BF*15	Bill Cycle
QTY*KC*752*K1	Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load

Example: Historical Interval Usage by Meter

Currently no utilities support HI by meter.

Example: Pennsylvania Net Metering / Customer Generation

Historical Interval Usage Summarized by Account – with Net Metering

BPT*52*2012070112300001*20120701*C1	Transaction Set Purpose Code: 52, Response to Historical Inquiry Reference Identification: 2012070112300001, Transaction Date: 20120701, Report Type Code: C1, Interval Usage
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*JANE DOE	Customer name
REF*12*519703123457	LDC Account Number
REF*45*451105687500	Old LDC Account Number
PTD*SU	Summary Loop for kwh (QTY, DTM, DTM for each month)
QTY*QD*52110*KH	Net Consumption Quantity (kwh)
DTM*150*20120529	Service Period Start
DTM*151*20120630	Service Period End
QTY*87*34510*KH	Net Generation Quantity (kwh)
DTM*150*20120701	Service Period Start
DTM*151*20120731	Service Period End
PTD*BQ	Summary loop for KH (one for each month)
DTM*150*20120529	Service Period Start
DTM*151*20120630	Service Period End
REF*MT*KH060	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20120529*0100*ED	End date and time of the period for which the quantity is provided.
QTY*87*128*KH	Generation
DTM*582*20120529*0200*ED	End date and time of the period for which the quantity is provided.
QTY*QD*216*KH	Consumption
DTM*582*20120529*0300*ED	End date and time of the period for which the quantity is provided.
.... .Continued on until the end of the period specified below	
QTY*QD*789*KH	Consumption
DTM*582*20120630*2300*ED	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20120630*2359*ED	End date and time of the period for which the quantity is provided.
PTD*BQ	Summary loop for KH (one for each month)
DTM*150*20120701	Service Period Start
DTM*151*20120731	Service Period End
REF*MT*KH060	Meter Type
QTY*QD*102*KH	Consumption
DTM*582*20120701*0100*ED	End date and time of the period for which the quantity is provided.
QTY*87*233*KH	Generation
DTM*582*20120701*0200*ED	End date and time of the period for which the quantity is provided.
QTY*QD*416*KH	Consumption
DTM*582*20120701*0300*ED	End date and time of the period for which the quantity is provided.
.... .Continued on until the end of the period specified below	
QTY*QD*781*KH	Consumption
DTM*582*20120731*2300*ED	End date and time of the period for which the quantity is provided.
QTY*QD*700*KH	Consumption
DTM*582*20120731*2359*ED	End date and time of the period for which the quantity is provided.
PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle

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REF*KY*ASUN	Special Meter Configuration (PPL sends, other PA EDCs implementing in 2013/14)
REF*LF*2	Loss Factor (FE Only; optional others)
REF*LO*RS	Load Profile
REF*NH*RESNH	LDC Rate Code
REF*SV*SECONDARY	Service Voltage (FE Only; optional others)
QTY*KC*752*K1	Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load