

**Pennsylvania
New Jersey
Delaware
Maryland**

Implementation Guideline

For

Electronic Data Interchange

TRANSACTION SET

867

**Historical Usage
Ver/Rel 004010**

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Summary of Changes

June 29, 1999 Version 1.0	Initial Release. Changes made since last draft: <ul style="list-style-type: none"> • Changed “EGS” to “ESP” and “EDC” to “LDC” throughout the guideline. Added notes page with “LDC Definitions” and “ESP Definitions”. • Added “How to use the implementation guideline” page. In addition, changed all headers to the true X12 definition. Also corrected the Table on Page 4 to reflect X12 definitions and added the words “X12 Structure” to the title on that page.
July 21, 1999 Version 1.0a	<ul style="list-style-type: none"> • Added Note for New Jersey to indicate all utilities plan to send summarized data by account (SU loop). No utility plans to send the data by meter (PM loop) • Added note to clarify the utility will send the <u>current</u> transmission obligation and capacity obligation values. Historical Capacity and Transmission obligation is NOT being sent via this transaction. • Corrected words in Example for transmission and capacity obligation. • Added clarifying comment to SU loop to indicate there should be one SU loop for each unit of measurement (applies to all states).
October 1, 1999 Version 1.0c	<ul style="list-style-type: none"> • Added Delaware Delmarva Information • Moved rules from the data dictionary to the Notes section of the implementation guide. • Clarified the PTD loops to indicate that there must be one loop per unit of measure. • Clarifications to several NJ Use items. • Clarification to examples.
November 4, 1999 Version 1.1	This is a FINAL version for Pennsylvania and New Jersey
December 23, 1999 Draft version 1.1MD1	<ul style="list-style-type: none"> • Add Maryland use to document – the changes were added to the version 1.1 of the regional standards • Added Data Dictionary • Added Table of Contents
January 17, 2000 Draft version 1.1MD2	Clarified REF*45 only used when LDC sending transaction.
February 24, 2000 Version 1.1MD3	Clarified use of Old Acct Number (REF*45) for MD
March 31, 2000 Version 1.1MD4	<ul style="list-style-type: none"> • Clarified use of FG loop for MD • Add load profile and LDC rate code to FG loop for MD future use • This transaction is considered FINAL for Maryland
May 14, 2000 Version 1.2	This document is a new finalized version of PA and MD. NJ is still using Version 1.1.
August 11, 2000 Version 1.2a	Indicate PSEG will use the PTD01=PM loop, rather than the PTD01=SU loop.
September 10, 2000 Version 1.3	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware (Delmarva only).
October 19, 2001 Version 1.3rev01	<ul style="list-style-type: none"> • Incorporate Delaware Electric Coop (DEC) information for Delaware • Incorporate PA Change Control 028 – change REF*11 from optional to conditional if supplier of record is requesting usage
December 13, 2001 Version 1.3rev02	<ul style="list-style-type: none"> • Incorporate NJ Change Control to allow sending of LDC rate code and LDC load Profile in the “FG” loop. <ul style="list-style-type: none"> • Incorporate DE Change Control to allow sending of LDC rate code and LDC load Profile in the “FG” loop. Indicate not used by DEC.
January 9, 2002 Version 2.0	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
December 10, 2003 Version 2.0.1	Incorporate changes for NJ – add TOU values to both PTD*SU and PTD*PM loops. FG loop – make REF*NH required, add optional REF*BF. Add REF*TU to PTD*PM loop.
May 12, 2004 Version 2.0.2	Incorporate changes for PA Change Control 040. This allows TOU information to be provided optionally.

February 16, 2012

Version 3.01

January 20, 2006 Version 2-0-3D	<ul style="list-style-type: none"> • Incorporate NJ Change Control 005 (NJ CleanPower program changes) • Incorporate NJ Change Control 006 to reflect current practices
October 23, 2006 Version 2-0-4D	<ul style="list-style-type: none"> • Incorporate PA Change Control 043 (Add K4 – kilovolt amperes) • Incorporate NJ Change Control 009 (NJ Clean Power – RECO unmetered) • Incorporate NJ Change Control 011 (Clarify PSEG use of LDC Rate Type)
November 3, 2006 Version 2-0-5D	<ul style="list-style-type: none"> • Incorporate NJ Change Control 012 (Change Billing Cycle (REF*BF) to indicate it will be required for all utilities. PSEG and RECO will be implementing in 1Q 2007).
February 12, 2007 Version 2-0-6F	<ul style="list-style-type: none"> • Considered FINAL for PA and NJ
July 4, 2009 Version 2-0-8D	<ul style="list-style-type: none"> • Incorporate NJ Change Control PSEG-E-HU (Indicate PSEG will send SU loop, will send REF*NH in FG loop) Incorporate PA Change Control 049 (PTD*FG, QTY*KC, QTY*KZ required for PJM participants) Incorporate PA Change Control 052 (REF*BF required for PJM participants) • Incorporate PA Change Control 053 (REF*NH required for PJM participants) • Incorporate PA Change Control 054 (REF*LO required for PJM participants) • Incorporate PA Change Control 055 (PECO modifications RT loop) • Incorporate MD Change Control RM17-HU
January 24, 2010 Version 2.1	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
November 4, 2010 Version 2.1.1D	<ul style="list-style-type: none"> • Incorporate PA Change Control 65 (REF*LF and REF*SV required for First Energy) • Incorporate PA Change Control 71 (add QTY01=KA as optional) • Incorporate MD Change Control – Admin (Admin/Cleanup for MD)
February 28, 2011 Version 3.0	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
February 16, 2012 Version 3.01	<ul style="list-style-type: none"> • Incorporate PA Change Control 081 (Clarify RT loop) • Incorporate PA Change Control 085 (REF*KY) • Incorporate PA Change Control 090 (REF03 in REF*KY) • Incorporate PA Change Control 093 (admin updates) • Incorporate MD Change Control 008 (clarify PEPCO HU/HI support) • Incorporate MD Change Control 010 (PEPCO AMI Support)

General Notes

Use

- 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, 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" (Summary) in PTD01, else if providing history by meter, use "PM" (Physical Meter) in PTD01.

LDC Definitions:

The term LDC (Local Distribution Company) in this document refers to the utility. Each state may refer to the utility by a different acronym:

- EDC – Electric Distribution Company (Pennsylvania, Delaware)
- LDC – Local Distribution Company (New Jersey)
- EC – Electric Company (Maryland)

ESP Definitions:

The term ESP (Energy Service Provider) in this document refers to the supplier. Each state may refer to the supplier by a different acronym:

- EGS – Electric Generation Supplier (Pennsylvania)
- TPS – Third Party Supplier (New Jersey)
- ES – Electric Supplier (Delaware)
- ES – Electricity Supplier (Maryland)

Renewable Energy Provider Definition:

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:

- GPM – Green Power Marketer (New Jersey)

Note: The transaction will either have an ESP or a Renewable Energy Provider, but not both.

Pennsylvania Notes

1. The Pennsylvania default is 12 months of Historical Usage, the following EDCs offer more than 12 months...
 - a. PPLEU – default is 12 months; ESP may request number of months (1-24) via the AMTLD in 814E/814HU
 - b. PECO – default is 24 months

Maryland Notes

1. Measured/Billed Demand – add note to Demand segment to indicate AP, BGE, and Pepco do not store measured demand, and will send Billed demand. Delmarva only stores Measured demand.

2. Providing of Historical Interval data

- Delmarva– Supplier can access interval data via web interface. Supplier will receive 867HU. The 814 Historical Usage Response transaction will include a REF*IP segment indicating account is an interval account.
- PEPCO – Supplier may request historical usage via 814 request. Upon PEPCO acceptance, the Supplier will receive REF*1P*HIA in the 814HU response indicating the account is interval. PEPCO will send 867HU summary and place the historical interval usage on the web interface. This process does NOT apply to AMI/Smart meter billed accounts, those will receive 867HU summary only.
- BGE – Supplier can access pre-enrollment data (interval and non-interval) via the web application. Supplier can access post-enrollment interval data via a web application. For post-enrollment non-interval, BGE will not provide the PTF*FG loop as this information is provided in the 814 enrollment response.
- AP – Supplier can request historical interval data via email and the response will be an email attachment.

3. Providing historical monthly data

- The following utilities provide historical data at the totalized level (PTD*SU loops) – Delmarva pre- and post-enrollment, BGE for post-enrollment HU only
- The following utilities provide historical data at the meter level (PTD*PM) – AP
- The following utilities provide historical data at the meter and totalized level (PTD*PM and PTD*SU loops) – Pepco

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.
Comments:

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

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
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		
	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>
			LOOP ID - CTT			1	
	010	CTT	Transaction Totals	O	1		n1
Must Use	030	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The number of line items (CTT01) is the accumulation of the number of LIN segments. If used, hash total (CTT02) is the sum of the value of quantities (QTY02) for each QTY segment.

Data Dictionary for 867 Historical 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)
11.2	LDC Account Number - unmetered	LDC Customer Account Number – Unmetered	REF03	N1: N101 = 8R REF01 = 12 REF03 = U	X(80)
12	Old Account Number	Previous LDC Customer Account Number	REF02	N1: N101 = 8R REF01 = 45	X(30)
<u>PTD Loop for Historical Usage that is Summarized/Totalized by Account (PTD01 = SU)</u>					
A PTD Loop will be provided for each type of consumption measured for the overall account (PTD01=SU) or by meter (PTD01 = PM) or by rate (PTD01=RT) in addition to 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)
13.1	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)
13.2	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02		9(15)
13.3	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)

13.4	Consumption	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	MEA03	MEA02 = PRQ	9(9),9(4)
13.5	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
13.6	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)
13.7	Service Period Start	Start date of the period for which these readings are provided	DTM02	QTY: DTM01 = 150	X(8)
13.8	Service Period End	End date of the period for which these readings are provided	DTM02	QTY: DTM01 = 151	X(8)
<u>PTD Loop for Historical Usage that is Summarized/Totalized by Rate (PTD01 = RT)</u>					
A PTD Loop will be provided for each type of consumption measured for the overall account (PTD01=SU) or by meter (PTD01 = PM) or by rate (PTD01=RT) in addition to the PTD loop that provides Scheduling Determinants when appropriate					
15.1	Loop Identification	Indicates if usage is provided totalized or by meter.	PTD01 = SU		X(2)
15.2	Profile Group	A code for the Load Profile used for this rate. Differs by LDC. Codes posted on LDC's Web site.	REF02	PTD: REF01= LO	X(30)
15.3	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)
15.4	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)
15.5	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02	QTY01	9(15)
15.6	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)
15.7	Consumption	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	MEA03	MEA02 = PRQ	9(9),9(4)
15.8	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
15.9	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)
15.10	Service Period Start	Start date of the period for which these readings are provided	DTM02	QTY: DTM01 = 150	X(8)
15.11	Service Period End	End date of the period for which these readings are provided	DTM02	QTY: DTM01 = 151	X(8)

<u>PTD Loop for Historical Usage that is provided by Meter (PTD01 = PM)</u>					
A PTD Loop will be provided for each type of consumption measured for the overall account (PTD01=SU) or by meter (PTD01 = PM) or by rate (PTD01=RT) 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 = PM		X(2)
22	Meter Number	Serial number of this specific meter (may have multiple meters)	REF02	PTD: REF01 = MG	X(30)
23	Meter Type	Code indicating type of consumption measured & interval at which measurements are taken.	REF02	PTD: REF01 = MT	X(5)
24	Type of metering used for billing	Indicates the type of metering information that will be sent on the 867 transaction.	REF02= 41 (on peak) 42 (off peak) 43 (intermediate) or 51 (totalizer)	NM1: REF01 = TU REF03 = Meter Type (See REF*MT)	X(2)
24.1	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)
25	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02	QTY01	9(15)
26	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)
27	Consumption	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	MEA03	MEA02 = PRQ	9(9),9(4)
28	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
29	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)
30	Service Period Start	Start date of the period for which these readings are provided	DTM02	QTY: DTM01 = 150	X(8)
31	Service Period End	End date of the period for which these readings are provided	DTM02	QTY: DTM01 = 151	X(8)
<u>PTD Loop for Scheduling Determinants (PTD01 = FG)</u>					
This PTD provides Scheduling Determinants when appropriate					
32	Loop Identification	Indicates if usage is provided totalized or by meter.	PTD01 = FG		X(2)

33	Loss Factor	Loss Factor	REF02	PTD:REF01= LF	X(30)
34	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)
35	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)
36	LDC Billing Cycle	LDC Cycle on which the bill will be rendered	REF02	PTD: REF01= BF	X(2)
37	Service Voltage	Service voltage	REF02	PTD:REF01= SV	X(30)
38	Meter Number	Meter Number	REF02	PTD: REF01= MG	X(2)
38	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)
39	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	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:	Required
DE Use:	Required
MD Use:	Required
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:	Required
DE Use:	Required
MD Use:	Required
Example:	BPT*52*1999070112300001*19990701*DD

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>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 DD Distributor Inventory Report Usage	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:	Required
DE Use:	Required
MD Use:	Required
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:	Required
DE Use:	Required
MD Use:	Required
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
DE Use:	Not used
MD Use:	Not used
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:	Required
DE Use:	Required
MD Use:	Required
Example:	N1*8R*JANE DOE

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
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:	Conditional: Required if it was previously provided on an 814 to the LDC and the ESP is the supplier of record.
NJ Use:	Optional if it was previously provided on an 814 to the LDC and the ESP is the supplier of record. Note: In New Jersey, Atlantic City Electric, JCP&L, and PSE&G will store ESP account number and will be required to send it if it was previously provided to the LDC. Rockland Electric will not be storing ESP account number, and will never send it. Atlantic City Electric will only be storing 20 characters.
DE Use:	Conditional: Required if it was previously provided on an 814 to the LDC and the ESP is the supplier of record. Note: Delmarva will only be storing 20 characters.
MD Use:	Optional if it was previously provided on an 814 to the LDC and the ESP is the supplier of record. Delmarva will only be storing 20 characters, all other utilities 30 characters.
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 - 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.
NJ Use:	Same as PA Note: RECO only uses REF03 value of "U" for unmetered usage. Separate historical usage requests must be made, and separate 867HU responses sent. No other EDC uses REF03.
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*12*519703123457

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
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
Optional	REF03	352	Description A free-form description to clarify the related data elements and their content U Unmetered	X AN 1/80

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. Note: Only used when LDC is sending this transaction.
NJ Use:	Same as PA
DE Use:	Not Used
MD Use:	Not Used by BGE, PEPCO, or Delmarva. APS: Required if the account number has changed in the last 60 days.
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=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:

PA Use:	Required if providing Historical Usage summarized/totalized by account. There must be one loop for each unit of measurement.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
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	Summary Consumption Summarized/Totalized for Account by unit of measure.	

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 period.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
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 (KWH)	

Segment: **MEA** Measurements
Position: 160
Loop: QTY
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:	The MEA segment is sent for each QTY loop. The MEA will indicate the “time of use” that applies to the QTY. If meter readings are included in the MEA, they will indicate the “time of use” that the meter readings apply to.
PA Use:	Optional field for time of use other than totalizer (MEA07=51). Optional for time of use equal to totalizer (MEA07=51) if that is the only time of use on the account.
NJ Use:	Must use for time of use other than totalizer (MEA07=51). Optional for time of use equal to totalizer (MEA07=51) if that is the only time of use on the account.
DE Use:	Not Used
MD Use:	Not Used
Examples:	MEA**PRQ*14*K1***51 (If meter measures multiple things, you need to send multiple QTY loops, one for each unit of measurement).

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 Consumption	O ID 1/3
Must Use	MEA03	739	Measurement Value The value of the measurement Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	X R 1/20
Must Use	MEA04	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 K2 Kilovolt Amperes Reactive Demand 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 Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	M ID 2/2

K4 Kilovolt Amperes (KVA)
K5 Kilovolt Amperes Reactive
KH Kilowatt Hour

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
43 Intermediate
51 Total
Totalizer
66 Shoulder

Segment: **DTM** Date/Time Reference (150=Service Period 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
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	DTM*150*19990630

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 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
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	DTM*151*19990701

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 (RT=Rate)
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:

PA Use:	Required if providing Historical Usage summarized/totalized by rate. Note: Different rates may have different bill periods.
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Examples:	PTD*RT

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	M ID 2/2
			RT	Rate
				Consumption Summarized/Totalized for Rate.

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 for PJM participants using this loop
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
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 for PJM participants using this loop
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*NH*GS1

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 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 period.
PA Use:	Required
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
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 (KWH)	

Segment: **MEA** Measurements
Position: 160
Loop: QTY
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:	The MEA segment is sent for each QTY loop. The MEA will indicate the “time of use” that applies to the QTY. If meter readings are included in the MEA, they will indicate the “time of use” that the meter readings apply to.
PA Use:	Optional field for time of use other than totalizer (MEA07=51). Optional for time of use equal to totalizer (MEA07=51) if that is the only time of use on the account.
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Examples:	MEA**PRQ*14*K1***51 (If meter measures multiple things, you need to send multiple QTY loops, one for each unit of measurement).

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Measurement Qualifier</u>	<u>O</u> <u>ID</u> <u>1/3</u>
Must Use	MEA02	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies	
			PRQ Consumption	
Must Use	MEA03	739	Measurement Value The value of the measurement	X R 1/20
			Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	
Must Use	MEA04	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 Represents potential power load measured at predetermined intervals	
			K2 Kilovolt Amperes Reactive Demand 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 Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	

K4 Kilovolt Amperes (KVA)
K5 Kilovolt Amperes Reactive
KH Kilowatt Hour

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
43 Intermediate
51 Total
Totalizer
66 Shoulder

Segment: **DTM** Date/Time Reference (150=Service Period 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
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*150*19990630

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 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
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*151*19990701

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 (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 Usage by meter. There must be one loop for each unit of measurement for each meter.
PA Use:	Required
NJ Use:	Required if providing Historical Usage by Meter; otherwise, not used. Note: No LDCs are using this loop
DE Use:	Not Used
MD Use:	Not Used
Examples:	PTD*PM

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
			PM Physical Meter Information	
			Consumption Provided by Meter by unit of measure.	

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:	Required
NJ Use:	Required if providing Historical Usage by Meter; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
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
NJ Use:	Required if providing Historical Usage by Meter; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
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	X AN 1/30
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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:

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:	Not Used
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*NH*GS1

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 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 (TU=Type of Metering)
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:	Not Used
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*TU*41*K1MON REF*TU*42*K1MON REF*TU*51*K1MON Multiple TU's will usually be sent on each 867!!!

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification TU Trial Location Code Used to indicate the type of metering information that will be sent on the 867 transaction.	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 41 Off Peak 42 On Peak 43 Intermediate 51 Totalizer	X AN 1/30
Must Use	REF03	352	Description A free-form description to clarify the related data elements and their content Meter Type (see REF*MT for valid codes). "COMBO" is not a valid code for this element.	X AN 1/80

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
NJ Use:	Required if providing Historical Usage by Meter; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
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 (KWH)	

Segment: **MEA** Measurements
Position: 160
Loop: QTY
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:	The MEA segment is sent for each QTY loop. The MEA will indicate the “time of use” that applies to the QTY. If meter readings are included in the MEA, they will indicate the “time of use” that the meter readings apply to.
PA Use:	Not Used
NJ Use:	Must use for time of use other than totalizer (MEA07=51). Optional for time of use equal to totalizer (MEA07=51) if that is the only time of use on the account.
DE Use:	Not Used
MD Use:	Not Used
Examples:	MEA**PRQ*14*K1***51 (If meter measures multiple things, you need to send multiple QTY loops, one for each unit of measurement).

Data Element Summary

	Ref.	Data	Attributes
	Des.	Element Name	
Must Use	MEA02	738 Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies	O ID 1/3
		PRQ Consumption	
Must Use	MEA03	739 Measurement Value The value of the measurement	X R 1/20
		Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	
Must Use	MEA04	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 Represents potential power load measured at predetermined intervals	
		K2 Kilovolt Amperes Reactive Demand 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 Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	
		K4 Kilovolt Amperes (KVA)	

		K5	Kilovolt Amperes Reactive	
		KH	Kilowatt Hour	
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	
		43	Intermediate	
		51	Total	
			Totalizer	
		66	Shoulder	

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:

PA Use:	Required
NJ Use:	Required if providing Historical Usage by Meter; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*150*19990630

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: 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
NJ Use:	Required if providing Historical Usage by Meter; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*151*19990701

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 (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 for PJM Customers
NJ Use:	Required for PJM Customers
DE Use:	Same as NJ
MD Use:	Required for PJM customers
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:	Request:	Not Used
	CE Accept Response:	Required for First Energy Companies; Optional for others
	All other Accept Responses:	Not Used
	Reject Response:	Not Used
NJ Use:	Not Used	
DE Use:	Not Used	
MD Use:	Not Used	
Example:	REF*LF*2	

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification LF Load Planning Number Loss Factor	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 (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 for PJM participants Note: Peco provides this field in the PTD*RT loop rather than this loop.
NJ Use:	Optional. Atlantic City Electric and JCP&L will provide.
DE Use:	Optional.
MD Use:	Required
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 for PJM participants. Note: Peco provides this field in the PTD*RT loop rather than this loop.
NJ Use:	Required
DE Use:	Optional.
MD Use:	Required
Example:	REF*NH*GS1

Data Element Summary

	Ref.	Data	Name	Attributes
	Des.	Element		
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 for PJM participants
NJ Use:	Required.
DE Use:	Not Used
MD Use:	Required
Example:	REF*BF*15

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 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:	Request:	Not Used
	CE Accept Response:	Required for First Energy Companies; Optional for others
	All other Accept Responses:	Not Used
	Reject Response:	Not Used
NJ Use:	Not Used	
DE Use:	Not Used	
MD Use:	Not Used	
Example:	REF*SV*SECONDARY	

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification SV Service Charge Number Service Voltage	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 PRIMARY SECONDARY Actual service voltage transmission value (Ex: 34.5kV)	X AN 1/30

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:	Not Used
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not used if EDC provides usage at the "METER" Level (PTD*PM level). Required if EDC provides usage at the "ACCOUNT" level (PTD*SU level)
Example:	REF*MG*1METER

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 MG Meter 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 1METER - Only one meter on the account MULTIPLE - Multiple meters on the account	X AN 1/30

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:	Optional when special meter configuration is present on an account. Note: As of v3.01, PA EDI CC 85 remains pending order by the PAPUC. The original intent of CC85 requires this segment for all LDCs. Being PPLEU has voluntarily implemented CC85 prior to the PUC order, the segment has been added as optional for v3.01.
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*KY* NSUN*0000026

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 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 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	X AN 1/30
Optional	REF03	352	Description A free-form description to clarify the related data elements and their content PPLEU: 7 byte numeric field 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:	Required for PJM participants.
NJ Use:	Required. This will be the Peak Load Contribution in effect when the transaction is requested. NJ Note: PSE&G sends Capacity Obligation to PJM.
DE Use:	Same as NJ
MD Use:	Required for PJM participants.
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: **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 for PJM participants.
NJ Use:	Required. 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:	Same as NJ
MD Use:	Required for PJM participants.
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: **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:	Required
DE Use:	Required
MD Use:	Required
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 Usage Summarized by Account

Heading:

BPT*52*1999070112300001*19990701*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>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*11*8645835	ESP Account Number
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*QD*5210*KH	Quantity (kwh)
DTM*150*19990529	Service Period Start
DTM*151*19990630	Service Period End
QTY*QD*5210*KH	Quantity (kwh)
DTM*150*19990427	Service Period Start
DTM*151*19990529	Service Period End
QTY*QD*4850*KH	Quantity (kwh)
DTM*150*19990327	Service Period Start
DTM*151*19990427	Service Period End

PTD*SU	Summary loop for Demand
QTY*QD*21*K1	Quantity (Demand)
DTM*150*19990529	Service Period Start
DTM*151*19990630	Service Period End
QTY*QD*19*K1	Quantity (Demand)
DTM*150*19990427	Service Period Start
DTM*151*19990529	Service Period End
QTY*QD*23*K1	Quantity (Demand)
DTM*150*19990327	Service Period Start
DTM*151*19990427	Service Period End

PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
REF*LO*RS	Load Profile
REF*NH*RESNH	LDC Rate Code
QTY*KC*752*K1	Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load

Example: Historical Usage Summarized by Rate

Heading:

BPT*52*1999070112300001*19990701*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>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*11*8645835	ESP Account Number
REF*12*519703123457	LDC Account Number
REF*45*451105687500	Old LDC Account Number

Detail:

Note: Rate loops (PTD*RT) would be repeated for each rate on the account.

Segment Contents	Element Description
PTD*RT	Rate Loop for kwh
REF*LO*RS	Load Profile
REF*NH*RESNH	LDC Rate Code
QTY*QD*5210*KH	Quantity (kwh)
DTM*150*19990529	Service Period Start
DTM*151*19990630	Service Period End
QTY*QD*5210*KH	Quantity (kwh)
DTM*150*19990427	Service Period Start
DTM*151*19990529	Service Period End
QTY*QD*4850*KH	Quantity (kwh)
DTM*150*19990327	Service Period Start
DTM*151*19990427	Service Period End

PTD*RT	Rate loop for Demand
REF*LO*RS	Load Profile
REF*NH*RESNH	LDC Rate Code
QTY*QD*21*K1	Quantity (Demand)
DTM*150*19990529	Service Period Start
DTM*151*19990630	Service Period End
QTY*QD*19*K1	Quantity (Demand)
DTM*150*19990427	Service Period Start
DTM*151*19990529	Service Period End
QTY*QD*23*K1	Quantity (Demand)
DTM*150*19990327	Service Period Start
DTM*151*19990427	Service Period End

PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
QTY*KC*752*K1	Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load

Example: Historical Usage Summarized by Meter

Heading:

BPT*52*1999070112300001*19990701*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>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*11*8645835	ESP Account Number
REF*12*519703123457	LDC Account Number
REF*45*451105687500	Old LDC Account Number

Detail:

Segment Contents	Element Description
PTD*PM	Summary Loop for kwh
REF*MG*M1234567	Meter Number
REF*MT*KHMON	Meter Type
REF*TU*42*KHMON	TOU Value
QTY*QD*5210*KH	Quantity (kwh)
MEA**PRQ*5210*KH***42	TOU indicator
DTM*150*19990529	Service Period Start
DTM*151*19990630	Service Period End
QTY*QD*5210*KH	Quantity (kwh)
MEA**PRQ*5210*KH***42	TOU indicator
DTM*150*19990427	Service Period Start
DTM*151*19990529	Service Period End
QTY*QD*4850*KH	Quantity (kwh)
MEA**PRQ*4850*KH***42	TOU indicator
DTM*150*19990327	Service Period Start
DTM*151*19990427	Service Period End

PTD*SU	Summary loop for Demand
REF*MG*M8884567	Meter Number
REF*MT*K1MON	Meter Type
REF*TU*42*K1MON	TOU Value
QTY*QD*21*K1	Quantity (Demand)
MEA**PRQ*21*K1***42	TOU indicator
DTM*150*19990529	Service Period Start
DTM*151*19990630	Service Period End
QTY*QD*19*K1	Quantity (Demand)
MEA**PRQ*19*K1***42	TOU indicator
DTM*150*19990427	Service Period Start
DTM*151*19990529	Service Period End
QTY*QD*23*K1	Quantity (Demand)
MEA**PRQ*23*K1***42	TOU indicator
DTM*150*19990327	Service Period Start
DTM*151*19990427	Service Period End

PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
REF*LO*RS	Load Profile
REF*NH*RESNH	LDC Rate Code
QTY*KC*752*K1	Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load

Example: Historical Usage Requested by Renewable Energy Provider

This example only shows the first few segments to show N1*G7 segment used by Renewable Energy Provider. Remaining segments would be identical to those used for an ESP transaction.

BPT*52*1999070112300001*19990701*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>Usage</i>
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*G7*RENEWABLE COMPANY*9*007909422GPM1	Renewable Energy Provider Name and DUNS information
N1*8R*JANE DOE	Customer name
REF*12*519703123457	LDC Account Number
.....	