Pennsylvania New Jersey Delaware Maryland

Implementation Guideline

Electronic Data Interchange

1

TRANSACTION SET

867
Historical Usage
Ver/Rel 004010

Table of Contents

	Changes	
	es	
•	a Notes	
•	otes	
•	Notes	
	otes	
	the Implementation Guideline	
	re	
	nary for 867 Historical Usage	
	ST Transaction Set Header	
	BPT Beginning Segment for Product Transfer and Resale	
_	N1 Name (8S=LDC Name)	
	N1 Name (SJ=ESP Name)	
	N1 Name (G7=Renewable Energy Provider Name)	
-	N1 Name (8R=Customer Name)	
Segment:		
Segment:	REF Reference Identification (12=LDC Account Number)	
Segment:		
	PTD Product Transfer and Resale Detail (SU=Summary)	
Segment:	REF Reference Identification (6W=Channel Number)	
Segment:	QTY Quantity	
Segment:	DTM Date/Time Reference (150=Service Period Date)	
Segment:	DTM Date/Time Reference (151=Service Period Date)	
	PTD Product Transfer and Resale Detail (RT=Rate)	
Segment:	REF Reference Identification (LO=Load Profile)	
Segment:	REF Reference Identification (NH=LDC Rate Class)	
Segment:	REF Reference Identification (PR=LDC Rate Sub-Class)	38
Segment:	QTY Quantity	39
Segment:	MEA Measurements	
Segment:	DTM Date/Time Reference (150=Service Period Date)	
Segment:	DTM Date/Time Reference (151=Service Period Date)	43
Segment:	PTD Product Transfer and Resale Detail (PM=Meter Detail)	44
Segment:	REF Reference Identification (MG=Meter Number)	45
Segment:	REF Reference Identification (MT=Meter Type)	46
Segment:	REF Reference Identification (NH – LDC Rate Class)	47
Segment:	REF Reference Identification (TU=Type of Metering)	48
Segment:	QTY Quantity	49
Segment:	MEA Measurements	50
Segment:	DTM Date/Time Reference (150=Service Period Start)	52
Segment:	DTM Date/Time Reference (151=Service Period End)	
	PTD Product Transfer and Resale Detail (FG=Scheduling Determinants)	
Segment:	REF Reference Identification (LF=Loss Factor)	55
Segment:	REF Reference Identification (LO=Load Profile)	
Segment:	REF Reference Identification (NH=LDC Rate Class)	
Segment:	REF Reference Identification (PR=LDC Rate Sub-Class)	
Segment:	REF Reference Identification (BF=LDC Bill Cycle)	
Segment:	REF Reference Identification (SV=Service Voltage)	
Segment:	REF Reference Identification (MG=Meter Number)	
Segment:	REF Reference Identification (KY=Special Meter Configuration)	
Segment:	REF Reference Identification (AN=Aggregate Net Energy Meter Role)	63
Segment:	QTY Quantity (KC=Peak Load Contribution)	
	DTM Date/Time Reference (007=PLC Effective Date)	
Segment:		
	SE Transaction Set Trailer	
_	istorical Usage Summarized by Account	
	istorical Usage Summarized by Rate	
	istorical Usage Summarized by Meter	
	istorical Usage Requested by Renewable Energy Provider	
-	Usage (4010) 2	IG867HUv6-8.docxx
		1000,110,000.00CAA

April 29, 2023

	Version	6.8
Example:	Pennsylvania, Maryland & New Jersey Net Metering / Customer Generation	. 73
Example:	Pennsylvania Effective Dates for PLC/NSPL	. 77

Summary of Changes

June 29, 1999 Version 1.0 July 21, 1999	 Initial Release. Changes made since last draft: 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.
Version 1.0a	 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	 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	 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	 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	 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	 Incorporate NJ Change Control to allow sending of LDC rate code and LDC load Profile in the "FG" loop. 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.

	Version 6.8
January 20, 2006 Version 2-0-3D	 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	 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	 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	Considered FINAL for PA and NJ
July 4, 2009 Version 2-0-8D	 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	 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	 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)
March 8, 2013 Version 6.0	 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 meter consumption reporting) Incorporate MD Change Control 014 (make REF*LF & REF*SV same as PA)
March 17, 2014 Version 6.1	 Incorporate PA Change Control 114 (add REF*PR to PTD*FG & PTD*RT loops) Incorporate MD Change Control 026 (PHI new CIS; changes to 867HU) Incorporate MD Change Control 029 (uniform net meter data reporting) Incorporate MD Change Control 030 (Net Meter Indicator in REF*KY) Incorporate NJ Change Control Electric 015 (Net Meter Indicator in REF*KY) Incorporate NJ Change Control Electric 016 (uniform net meter data reporting) Incorporate NJ Change Control Electric 019 (ACE new CIS: changes to 867HU/HI) Incorporate NJ Change Control Electric 028 (clarify RECO support of 867HU) Incorporate NJ Change Control Electric 031 (RECO removal from IG) Incorporate NJ Change Control Electric 032 (PSE&G admin updates)
February 18, 2015 Version 6.2	 Incorporate NJ Change Control Electric 035 (REF*MG in PTD*FG to Optional) Incorporate MD Change Control 037 (clean up MD notes section)

,	V CISION 0.8
March 14, 2017	• Incorporate NJ Change Control Electric 038 (Future PLC value/date for JCPL)
Version 6.3	• Incorporate MD Change Control 043 (Future PLC value/date for Potomac Edison)
	• Incorporate MD Change Control 045 (Aggregate Net Energy Metering family
	identifier in REF*AN)
March 18, 2018	• Incorporate PA Change Control 140 (Update to REF*KY gray box)
Version 6.4	• Incorporate PA Change Control 147 (Incorporate Citizens & Wellsboro into IG)
	• Incorporate NJ Change Control Electric 044 (Update to REF*KY gray box)
	• Incorporate MD Change Control 050 (Update to REF*KY gray box)
March 22, 2019	• Incorporate PA Change Control 149 (Add PA Use to REF*AN)
Version 6.5	• Incorporate MD Change Control 054 (Add new REF02 qualifiers to REF*AN)
	• Incorporate MD Change Control 056 (Clarify BGE Historical Usage in MD Notes)
	• Incorporate NJ Change Control Electric 048 (NJ Note – End of Clean Power Choice)
March 31, 2020	• Incorporate PA Change Control 151v2 (FirstEnergy PA net meter data reporting)
Version 6.6	• Incorporate PA Change Control 152 (Default months from 12 to 24)
	• Incorporate NJ Change Control Electric 051 (Default months from 12 to 24)
	• Incorporate MD Change Control 058 (Default months from 12 to 24)
March 25, 2022	• Incorporate MD Change Control 063 (Add DE notes for default 24 months)
Version 6.7	
April 29, 2023	Incorporate MD Change Control 068v2 (Add Energy Assistance support)
Version 6.8	(

General Notes

Use

- Historical Usage will be provided to an ESP upon Request. The request will be made using the 814E and 814HU 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

The Pennsylvania default is 24 months of Historical Usage

Requirements for uniform support of Net Metered Customers SU (Account Services Summary) Loop –reports consumption summarized/totalized for account by unit of measure for net metered customers. (Citizens & Wellsboro, First Energy, PPL, and UGI support)

- 1. All PA EDCs (Excluding FirstEnergy)
 - a. 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.
 - b. 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).
 - c. In either scenario, the QTY02 will never be signed negative.
- 2. FirstEnergy Companies
 - a. Instead of reporting net KH in the SU loop, FirstEnergy will report the consumption and generation separately in their own loop. The REF*6W Channel ID will identify the appropriate loop
 - i. REF*6W*1 Loop reports consumption (delivered) KH (QTY01 w/actual = QD or estimated = KA)
 - ii. REF*6W*2 Loop reports generation (received) KH (QTY01 w/actual = 87 or estimated = 9H
- RT (Rate) Loop –reports consumption summarized/totalized by rate and by unit of measure for net metered customers. (PECO supports)
 - 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 OTY02 will never be signed negative.
- PM (Meter Detail) Loop reports consumption provided by meter by unit of measure for net metered customers: (Duquesne only)
 - 1. Single meter reporting both in and out flow.
 - a. 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.
 - b. 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).
 - c. In either scenario, the QTY02 will never be signed negative.

Maryland Notes

Demand

• Measured/Billed Demand – add note to Demand segment to indicate PE, BGE, Pepco and Delmarva do not store measured demand, and will send Billed demand.

Historical Usage Reporting

• As per MD CC 058, the Maryland default is 24 months of Historical Usage data.

• **BG&E:** Historical Usage requests are processed as follows...

LIN05	Scenario	REF1P	867 Action
		(Accepted	
		Request)	
LIN05 =HU	HU available on non-interval account	No REF1P sent	867HU sent
LIN05 =HU	HU not available	REF1P = HUU	No 867 sent
LIN05 =HU	HU available on interval account (AMI & MV90)	No REF1P sent	867HU sent
LIN05 = HI	HI available (AMI & MV90) NOTE: MV90 aggregated to 60 minutes (15 min available on CDWeb)	No REF1P sent	867HI sent
LIN05 = HI	Neither historical interval detail or summary data available	REF1P = HIU	No 867 sent
LIN05 = HI	HI data unavailable BUT summary HU data is available	REF1P = HIU	867HU sent
LIN05 = HI	HI request on non-interval account	REF1P = UMA	867HU sent

 Delmarva MD & PEPCO MD: The supplier will receive 867HU for non-interval billed accounts and the 867HI for interval billed accounts. Historical Usage requests will be processed as follows:

LIN05	Scenario	REF1P Code	867 Action
LIN05 =	HU available on non-interval account	No REF1P sent	867HU sent
HU			
LIN05 =	HU not available	REF1P = HUU	No 867 sent
HU			
LIN05 = HI	HI available	No REF1P sent	867HI sent
LIN05 = HI	Neither historical interval detail or	REF1P = HIU	No 867 sent
	summary data available		
LIN05 = HI	HI data unavailable BUT summary HU	No REF1P sent	867HU sent
	data is available		
LIN05 = HI	HI request on non-interval account	No REF1P sent	867HU sent

• **Potomac Edison Note:** PE will provide an 867HU (Monthly Historical Information) for all Historical usage (HU) requests. Requests for historical interval data must be made outside of EDI.

Historical Usage Reporting Level

- Providing historical monthly data
 - Delmarva, PEPCO, Potomac Edison & BGE

 totalized to account level (PTD*SU loop)

Net Meter Data Reporting Requirements

- Maryland EDI Change Control 029 adopted uniform net meter data reporting for Maryland. Utility support as of December 2014...
 - BGE est. by end of 1Q 2015
 - PHI (Delmarva & PEPCO) with new CIS
 - Potomac Edison (FE) –by end of 2Q 2015 (IU/HIU)

Net Meter Data Reporting Requirements (Cont.)

- SU (Account Services Summary) Loop –reports consumption summarized/totalized for account by unit of measure for net metered customers. (Delmarva, PEPCO, Potomac Edison and BGE)
 - 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

Version 6.8

- 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.

Maryland Energy Assistance Program MD PC55 regulations require Suppliers to be certified by the Maryland PSC to serve customer receiving Energy Assistance. MD EDI CC68v2 addresses changes to the EDI 867 Historical Usage & 867 Historical Interval Usage to support PC55 implementation as follows

- Add REF*EA (Energy Assistance Customer) to provide the current status of the customer's Energy Assistance in the Utility System at the time of the Historical Usage transaction from the utility
 - It remains the sole responsibility of the Supplier to confirm the Energy Assistance status directly with the customer and/or the Office of Home Energy Programs (OHEP).

The REF*EA is not indicative of the customer's Energy Assistance status in the event the customer is receiving assistance for Gas commodity only or if customer moved into utility service territory and was previously receiving Energy Assistance.

New Jersey Notes

Historical Usage Information

As per Change Control NJE051, the New Jersey default is 24 months of Historical Usage data.

Atlantic City Electric: Effective with new CIS, the supplier will receive 867HU for non-interval billed accounts and the 867HI for interval billed accounts. Historical Usage requests will be processed as follows:

LIN05	Scenario	REF1P Code	867 Action
LIN05 = HU	HU available on non-interval account	No REF1P sent	867HU sent
LIN05 = HU	HU not available	REF1P = HUU	No 867 sent
LIN05 = HI	HI available	No REF1P sent	867HI sent
LIN05 = HI	Neither historical interval detail or summary data available	REF1P = HIU	No 867 sent
LIN05 = HI	HI data unavailable BUT summary	No REF1P sent	867HU sent
	HU data is available		
LIN05 = HI	HI request on non-interval account	No REF1P sent	867HU sent

Rockland Electric Company: follows the New York EDI 867 Historical Usage standard. The NY standard does not include PTD*FG loop which is required for the other NJ electric utilities in PJM.

- Rockland Electric sends PLC in REFPR segment of BQ loop
- NSPL is provided manually upon request, contact Rockland Electric for details

Net Meter Data Reporting Requirements

NJ EDI Change Control Electric 016 mandates specific data requirements in support of net metered customers.

- SU (Account Services Summary) Loop –reports consumption summarized/totalized for account by unit of measure for net metered customers. (used by Atlantic City Electric JCP&L)
 - 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.
- SU (Account Services Summary) Loop –reporting both consumption and billed usage for net metered customers. (used by PSE&G Only)
 - 1. Reports customer's billed usage in the QTY01 = QD. This value is the billed usage amount which is the net of the generation/consumption..
 - 2. Reports customer's actual KH consumption in the MEA segment. The QTY01 less the MEA03 = customer's generation KH.
 - 3. In either location (QTY02/MEA03) the value will never be signed negative.

NJ Clean Power Choice

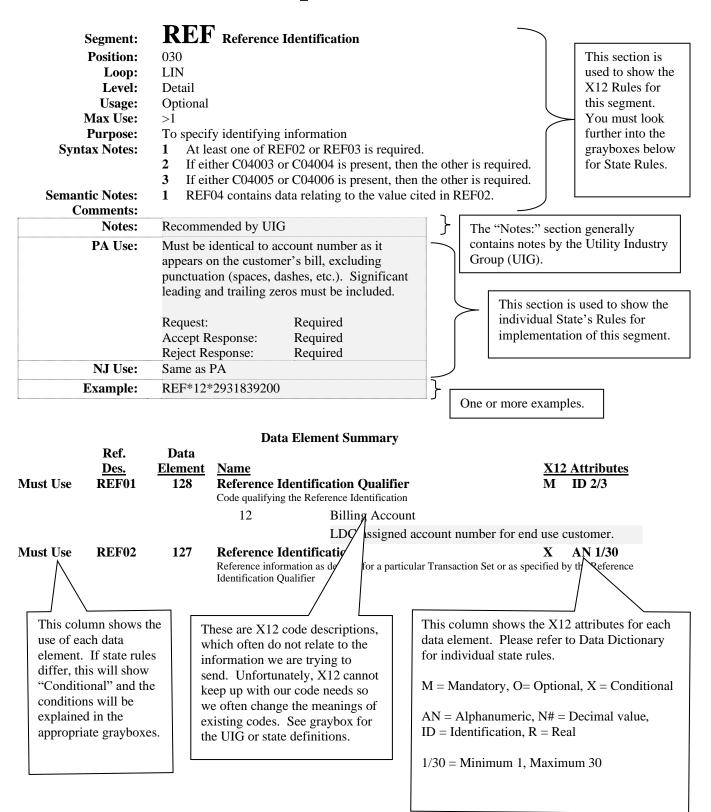
Pursuant to Board Order, Docket No. QO18040393, the Clean Power Choice Program is coming to an end effective February 28, 2019. The EDI segments and data elements used for Clean Power Choice will remain in the EDI Implementation Guidelines to support any cancel/rebill scenarios or for future use in the event another program is established that may need these data elements.

Delaware Notes

Historical Usage Information

As per MD EDI CC 063, the Delaware default is 24 months of Historical Usage data.

How to Use the Implementation Guideline



867 Historical Usage X12 Structure

Functional Group ID= \mathbf{PT}

Heading:

	Pos. No.	Seg. <u>ID</u>	Name	Req. <u>Des.</u>	Max.Use	Loop <u>Repeat</u>	Notes and Comments
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	О	1		
	120	REF	Reference Identification	О	12		

Detail:

	Pos. <u>No.</u>	Seg. <u>ID</u>	Name LOOP ID - PTD	Req. Des.	Max.Use	Loop Repeat >1	Notes and Comments
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:

	Pos. No.	Seg. <u>ID</u>	<u>Name</u>	Req. Des.	Max.Use	Loop <u>Repeat</u>	Notes and Comments
			LOOP ID - CTT	•		1	
	010	CTT	Transaction Totals	О	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

Appl Field	Field Name	Description	EDI Element	Loop / Related EDI Qualifier	Data Type
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	$BPT04 = \mathbf{DD}$	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)

PTD Loop for Historical Usage that is Summarized/Totalized by Account (PTD01 = SU)

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	Channel Number	Indicates Channel Number	REF02	PTD: REF01= 6W	X(30)
13.2		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)
13.3	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02		9(15)
13.4	Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)

13.5	Consumption	Represents quantity of consumption	MEA03	$MEA02 = \mathbf{PRQ}$	9(9).9(4)
		delivered for service period. Contains			
		the difference in the meter readings (or			
		as measured by the meter) multiplied by			
		various factors, excluding Power Factor.			
13.6	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
13.7	Measurement	Code used to benchmark, qualify, or	MEA07		X(2)
	Significance Code	further define a measurement value.			()
13.8	Service Period Start	Start date of the period for which these	DTM02	OTY: DTM01 = 150	X(8)
15.0	Service 1 Show Start	readings are provided	-		12(0)
13.9	Service Period End	End date of the period for which these	DTM02	QTY: DTM01 = 151	X(8)
		readings are provided		-	(-)

PTD Loop for Historical Usage that is Summarized/Totalized by Rate (PTD01 = RT)

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.	$PTD01 = \mathbf{RT}$		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	LDC Rate Sub-Class	Code to provide further classification of LDC Rate Code	REF02	PTD: REF01= PR	X(30)
15.5	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)
15.6	Quantity Delivered	Represents quantity of consumption delivered for billing period.	QTY02	QTY01	9(15)
15.7	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03		X(2)
15.8	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)
15.9	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
15.10	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)
15.11	Service Period Start	Start date of the period for which these readings are provided	DTM02	QTY: DTM01 = 150	X(8)

15.12	End date of the period for which these readings are provided	DTM02	QTY: DTM01 = 151	X(8)

PTD Loop for Historical Usage that is provided by Meter (PTD01 = PM)

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.	$PTD01 = \mathbf{PM}$		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 (off peak) 42 (on 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)

PTD Loop for Scheduling Determinants (PTD01 = FG)

This PTD provides Scheduling Determinants when appropriate

April 29, 2023Version 6.8

				V CI SI	on 6.8
32	Loop Identification	Indicates if usage is provided totalized or by meter.	$PTD01 = \mathbf{FG}$		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 Rate Sub-Class	Code to provide further classification of LDC Rate Code	REF02	PTD: REF01= PR	X(30)
37	LDC Billing Cycle	LDC Cycle on which the bill will be rendered	REF02	PTD: REF01= BF	X(4)
38	Service Voltage	Service voltage	REF02	PTD:REF01= SV	X(30)
39	Meter Number	Meter Number	REF02	PTD: REF01=MG	X(2)
40	Special Meter Configuration Code	Used to convey there's a special meter present on the account. For example, Net Metering	REF02	PTD: REF01 = KY	X(3)
40.1	Special Meter Configuration Information	PPLEU-used to report the max K1 (demand) the special meter supports	REF03	PTD: REF01 = KY	X(80)
41	Aggregate Net Energy Meter Role	The role of the customer account in the Aggregate Net Energy Meter family	REF02	PTD: REF01= AN	X(30)
42	Peak Load Contribution	Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM Peak).	QTY02	PTD: QTY01 = KC	9(15)
43	Unit of Measure	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03 = K1	PTD: $QTY01 = \mathbf{QD}$	X(2)
44	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)
45	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03 = K1	$PTD: QTY01 = \mathbf{QD}$	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:

0 0	
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	ST*867*00000001

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

 $\textbf{Segment:} \quad \textbf{BPT} \text{ Beginning Segment for Product Transfer and Resale}$

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use:

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

transmit identifying data

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

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

2 BPT03 identifies the transfer/resale date.3 BPT08 identifies the transfer/resale time.

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

Comments:

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	BPT*52*1999070112300001*19990701*DD

Must Use	Ref. <u>Des.</u> BPT01	Data Element 353	Name Transaction Set Pu Code identifying purpose	•	Attı M	ributes ID 2/2
			52	Response to Historical Inquiry Response to a request for historical me	eter re	ading.
Must Use	BPT02	127	Reference Identific Reference information as Identification Qualifier	ation defined for a particular Transaction Set or as spec	O cified b	AN 1/30 by the Reference
			-	n identification number assigned by the mber should be unique over all time.	origir	nator of this
Must Use	BPT03	373	Date Date (CCYYMMDD)		M	DT 8/8
			The transaction crea application system.	tion date – the date that the data was pro	ocesse	ed by the
Must Use	BPT04	755	Report Type Code Code indicating the title of	or contents of a document, report or supporting ite	O em	ID 2/2
			DD	Distributor Inventory Report Usage		

 $N1 \ {\tt Name} \ ({\tt 8S=LDC} \ {\tt Name})$ **Segment:**

Position: 080 Loop: N1 Level: Heading Usage: Optional

Max Use:

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

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

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

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must

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

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

	Ref.	Data Florant	Name	Attributes
Must Use	<u>Des.</u> N101	Element 98	Entity Identifier Code Code identifying an organizational entity, a physical location, pro 8S Consumer Service Provider (Compared to the consumer Service Provider)	M ID 2/3 operty or an individual
			LDC	31)
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 Id 1 D-U-N-S Number, Dun & Brad	` '
			9 D-U-N-S+4, D-U-N-S Number Suffix	with Four Character
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

 ${\bf Segment:} \qquad N1 \; {\bf Name} \; ({\bf SJ=ESP} \; {\bf Name})$

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

Must Use	Ref. <u>Des.</u> N101	Data Element 98	<u>Name</u> Entity Identifier C	ode	Att M	ributes ID 2/3
			Code identifying an orga	unizational entity, a physical location, property or a Service Provider	ın indi	vidual
Must Use	N102	93	Name Free-form name ESP Company Nam	ESP	X	AN 1/60
Must Use	N103	66	Identification Cod Code designating the sys	e Qualifier stem/method of code structure used for Identificati D-U-N-S Number, Dun & Bradstreet	X on Coo	ID 1/2 de (67)
			9	D-U-N-S+4, D-U-N-S Number with F Suffix	our C	Character
Must Use	N104	67	Identification Cod Code identifying a party ESP D-U-N-S Num	-	X	AN 2/20

N1 Name (G7=Renewable Energy Provider Name) **Segment:**

Position: 080 Loop: N1 Level: Heading Usage: Optional

Max Use:

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

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

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

	Ref.	Data <u>Element</u>	Name Name		ributes
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, prop G7 Entity Providing the Service	M perty or an indi	ID 2/3 vidual
			Renewable Energy Provider		
Must Use	N102	93	Name Free-form name	X	AN 1/60
			Renewable Energy Provider Company Name		
Must Use	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Ide 1 D-U-N-S Number, Dun & Brad		ID 1/2 de (67)
			9 D-U-N-S+4, D-U-N-S Number Suffix	with Four C	Character
Must Use	N104	67	Identification Code Code identifying a party or other code Renewable Energy Provider D-U-N-S Number or D-	X U-N-S + 4 N	AN 2/20 Number

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

Must Use	Ref. <u>Des.</u> N101	Data Element 98	Name Entity Identifier C	code unizational entity, a physical location, property or	M	ributes ID 2/3
			8R	Consumer Service Provider (CSP) Cu		
				End Use Customer		
Must Use	N102	93	Name		X	AN 1/60
			Free-form name Customer Name as	it appears on the customer's bill		
			Castomer rame as	it appears on the eastonier 5 om		

Segment: \mathbf{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.

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

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

Comments:

,		
	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.
	DE Use:	Conditional: Required if it was previously provided on an 814 to the LDC and the ESP is the supplier of record.
	MD Use:	Optional if it was previously provided on an 814 to the LDC and the ESP is the supplier of record.
	Example:	REF*11*8645835

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	REF01	128	Reference Identific	cation Qualifier	M	ID 2/3
			Code qualifying the Refe	erence Identification		
			11	Account Number		
				ESP-assigned account number for end	use c	ustomer.
Must Use	REF02	127	Reference Identific	eation	X	AN 1/30
			Reference information as Identification Qualifier	s defined for a particular Transaction Set or as spe	cified l	by the Reference

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.

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

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

Comments:

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
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*12*519703123457

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	REF01	128	Reference Identific	ation Qualifier	M	ID 2/3
			Code qualifying the Refe	rence Identification		
			12	Billing Account		
				LDC-assigned account number for end	l use o	customer.
Must Use	REF02	127	Reference Identific	ation	X	AN 1/30
			Reference information as Identification Qualifier	defined for a particular Transaction Set or as spe	cified b	by the Reference

Segment: \mathbf{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.

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

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

Comments:

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. PE: Required if the account number has changed in the last 60 days.
Example:	REF*45*451105687500

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	REF01	128	Reference Identific	ation Qualifier	M	ID 2/3
			Code qualifying the Refe	rence Identification		
			45	Old Account Number		
				LDC's previous account number for the	ne end	luse
				customer.		
Must Use	REF02	127	Reference Identific	ation	X	AN 1/30
			Reference information as Identification Qualifier	defined for a particular Transaction Set or as spe	cified l	by the Reference

Segment: PTD Product Transfer and Resale Detail (SU=Summary)

Position: 010
Loop: PTD
Level: Detail
Usage: Mandatory

Max Use:

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

provide identifying data

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

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

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2

Code identifying the type of product transfer

SU Summary

Consumption Summarized/Totalized for Account by

unit of measure.

Segment: \mathbf{REF} Reference Identification (6W=Channel 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.

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

Semantic Notes:

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

Comments:

PA Use:	Used by FirstEnergy: Channel 1 = Delivered kWh and Channel 2 = Received kWh
NJ Use:	N/A
DE Use:	N/A
MD Use:	N/A
Example:	REF*6W*1

	Ref.	Data		·		
	Des.	Element	<u>Name</u>		<u>Attı</u>	<u>ibutes</u>
Must Use	REF01	128	Reference Idea	ntification Qualifier	\mathbf{M}	ID 2/3
			Code qualifying	g the Reference Identification		
			6W	Sequence Number		
				Channel Number		
Must Use	REF02	127	Reference Idea	ntification	\mathbf{X}	AN 1/30
			Reference infor	rmation as defined for a particular Transaction	Set o	or as
			specified by the	e Reference Identification Qualifier		
			Channel Numb	er		

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 Eleme	ent Summary		
	Ref.	Data				
	Des.	Element	<u>Name</u>	<u>4</u>	Attr	<u>ibutes</u>
Must Use	QTY01	673	Quantity Qualifier	-	M	ID 2/2
			Code specifying the type	of quantity		
			KA	Estimated Quantity Delivered		
				Used when the quantity delivered is an e	stim	ated
				quantity.		
			QD	Actual Quantity Delivered		
				Used when the quantity delivered is an a		l quantity.
			87	Actual Quantity Received (Net Metering		
				Used when the net generation quantity reactual.	eceiv	ved is
			9H	Estimated Quantity Received (Net Mete	ring	•)
				Used when the net generation quantity re		
				estimated.		
Must Use	QTY02	380	Quantity Numeric value of quantity	-	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	easurement Code in which a value is being expressed, or manner in w	M vhich	ID 2/2 a measurement
			K 1	Kilowatt Demand (KW)		
				Represents potential power load measure	ed at	
				predetermined intervals		
			K2	Kilovolt Amperes Reactive Demand (KV		
				Reactive power that must be supplied for		* 1
				of customer's equipment; billable when l		vatt demand
			***	usage meets or exceeds a defined parame		
			K3	Kilovolt Amperes Reactive Hour (KVAI		
				Represents actual electricity equivalent t hours; billable when usage meets or exceparameters		
			K4	Kilovolt Amperes (KVA)		
			KH	Kilowatt Hour (KWH)		
			IXII	IXIIOWatt IIOui (IXWII)		

Segment: MEA Measurements

Position: 160
Loop: QTY
Level: Detail
Usage: Optional
Max Use: 40

Comments:

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

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

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

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

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

5 Only one of MEA08 or MEA03 may be present.

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

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

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

Notes:	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. Note: For PSE&G net metered customer, the customer's actual KH consumption is reported in the MEA03. The MEA03 less the QTY02 equals customer generation.
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).

Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Name Measurement Qua Code identifying a speci	alifier ific product or process characteristic to which a me	O	ributes ID 1/3 nent applies
			PRQ	Consumption		
Must Use	MEA03	739	Measurement Val The value of the measur		X	R 1/20
Must Use	MEA04	355	Represents quantity difference in the movarious factors, excurnit or Basis for Market Code specifying the unit has been taken	er) mi M	ultiplied by ID 2/2	
			K1	Kilowatt Demand		
				Represents potential power load measu predetermined intervals		
			K2			
				_	ecific types watt demand	
			K3 Kilovolt Amperes Reactive Hour			

						Version 6.8
				Represents actual electricity equivalen hours; billable when usage meets or exparameters		
			K4	Kilovolt Amperes (KVA)		
			K5	Kilovolt Amperes Reactive		
			KH	Kilowatt Hour		
Must Use	MEA07	935	Measurement Sig	gnificance Code	O	ID 2/2
		Code used to benchmark, qualify or further define a measurement value				nt 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.

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

	Ref.	Data				
	Des.	Element	Name		Att	<u>ributes</u>
Must Use	DTM01	374	Date/Time Qu	ıalifier	\mathbf{M}	ID 3/3
			Code specifying ty	ype of date or time, or both date and time		
			150	Service Period Start		
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.

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

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

Segment: ${f PTD}$ Product Transfer and Resale Detail (RT=Rate)

Position: 010 Loop: PTD Level: Detail Usage: Mandatory

Max Use:

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

provide identifying data

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

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				

	Ref.	Data			
	Des.	Element	Name		Attributes
Must Use	PTD01	521	Product Tra	nsfer Type Code	$\overline{\mathbf{M}}$ ID $2/2$
			Code identifying	the type of product transfer	
			RT	Rate	

Segment: \mathbf{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.

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

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

Comments:

F	PA Use:	Required for PJM participants using this loop
Γ	NJ Use:	Not Used
Ι	DE Use:	Not Used
M	ID Use:	Not Used
Ex	ample:	REF*LO*GS

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

REF Reference Identification (NH=LDC Rate Class) **Segment:**

Position: 030 Loop: PTD Level: Detail Usage: Optional Max Use: 20

Purpose: To specify identifying information

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

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

1 **Semantic Notes:** 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					

	Ref.	Data				
	Des.	Element	<u>Name</u>		<u>Att</u>	<u>ributes</u>
Must Use	REF01	128		entification Qualifier he Reference Identification	M	ID 2/3
			NH	LDC Rate Code		
Must Use	REF02	127	Reference Ide Reference inform Identification Qua	ation as defined for a particular Transaction	X Set or as specified	AN 1/30 by the Reference

 $\textbf{REF} \ \textbf{Reference Identification} \ (\textbf{PR=LDC Rate Sub-Class})$

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.

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

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

Comments:

REF02

Must Use

PA Use:	Conditional: If maintained by utility, must be sent for each meter that is used for billing					
	purposes. This segment must also be sent when account has UNMETERED services					
	available for generation service.					
NJ Use:	Not Used					
DE Use:	Not Used					
MD Use:	Not Used					
Example:	REF*PR*123					

Data Element Summary

	Kei.	Data				
	Des.	Element	Name		Att	<u>ributes</u>
Must Use	REF01	128	Reference	Identification Qualifier	\mathbf{M}	ID 2/3
			Code qualifyi	ing the Reference Identification		
			PR	Price Quote Number		
				LDC Rate Subclass - Used to provid	e furth	er
				classification of a rate.		

127 Reference Identification X AN 1/30

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

Identification Qualifier

QTY Quantity **Segment:**

Position: 110 Loop: QTY Level: Detail Usage: Optional

Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

Semantic Notes: 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:	Used by PSE&G
DE Use:	Not Used
MD Use:	Not Used
Example:	QTY*QD*5210*KH

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2	
	C		Code specifying the type		
			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 M Code specifying the units has been taken	leasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement	
			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:	Used by PSE&G
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).

Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Name Measurement Qua Code identifying a speci	alifier ific product or process characteristic to which a me Consumption	O	ributes ID 1/3 ment applies
Must Use	MEA03	739	Measurement Value of the measurement		X	R 1/20
			difference in the me	of consumption delivered for service peter readings (or as measured by the meteluding Power Factor.		
Must Use	MEA04	355		Measurement Code ts in which a value is being expressed, or manner in	M n which	ID 2/2 h a measurement
			K1	Kilowatt Demand		
			W)	Represents potential power load meast predetermined intervals	ured a	nt
			K2	Kilovolt Amperes Reactive Demand Reactive power that must be supplied to of customer's equipment; billable when usage meets or exceeds a defined parate	n kilo	watt demand
			K3 Kilovolt Amperes Reactive Hour			
				Represents actual electricity equivalen hours; billable when usage meets or exparameters		
			K4	Kilovolt Amperes (KVA)		

						v C131011 0.0
			K5	Kilovolt Amperes Reactive		
			KH	Kilowatt Hour		
Must Use	MEA07	935	Measurement	Significance Code	O	ID 2/2
			Code used to be	enchmark, qualify or further define a meas	uremen	t 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:	Used by PSE&G
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*150*19990630

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	DTM01	374	Date/Time Qu	ualifier	\mathbf{M}	ID 3/3
			Code specifying t	ype of date or time, or both date and time		
			150	Service Period Start		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as	CCYYMMDD		

 $DTM \ {\tt Date/Time} \ {\tt Reference} \ (151 \hbox{=-} Service \ {\tt Period} \ {\tt Date})$ **Segment:**

Position: 210 Loop: QTY Detail Level: Usage: Optional Max Use: 10

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

PA Use:	Required
NJ Use:	Used by PSE&G
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*151*19990701

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	$\overline{DTM01}$	374	Date/Time Qu	ualifier	M	ID 3/3
			Code specifying t	ype of date or time, or both date and time		
			151	Service Period End		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as	CCYYMMDD		

Segment: PTD Product Transfer and Resale Detail (PM=Meter Detail)

Position: 010
Loop: PTD
Level: Detail
Usage: Mandatory

Max Use:

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

provide identifying data

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

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

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2

Code identifying the type of product transfer

PM Physical Meter Information

Consumption Provided by Meter by unit of measure.

Segment: \mathbf{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.

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

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

Comments:

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

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	REF01	128	Reference Idea	ntification Qualifier	M	ID 2/3
			Code qualifying	g the Reference Identification		
			MG	Meter Number		
				Meter ID Serial Number		
Must Use	REF02	127	Reference Idea	ntification	\mathbf{X}	AN 1/30
				rmation as defined for a particular Transaction e Reference Identification Qualifier	n Set	or as

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.

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

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

Comments:

Ref.

Data

0 0	
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

Must Use	<u>Des.</u> REF01	Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification		<u>X12</u> M	2 Attributes ID 2/3
			MT	Meter Type		
			Billing Data Types and Interval Frequency		encies	S
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specification Qualifier		X ecified l	AN 1/30 by the Reference
			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			

Type of Consumption Metering Interval

K1	Kilowatt Demand	Nnn	Number of minutes from 001 to 999
K2	Kilovolt Amperes Reactive Demand	ANN	Annual
K3	Kilovolt Amperes Reactive Hour	BIA	Bi-annual
K4	Kilovolt Amperes	BIM	Bi-monthly
K5	Kilovolt Amperes Reactive	DAY	Daily
KH	Kilowatt Hour	MON	Monthly
T9	Thousand Kilowatt Hours	QTR	Quarterly

measurement. Valid values can be a combination of the following values:

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.

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

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

Comments:

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

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification		Att M	ributes ID 2/3
			NH	LDC Rate Code		
Must Use	REF02	127	Reference Ide Reference inform Identification Qua	ation as defined for a particular Transaction	X Set or as specified	AN 1/30 by the Reference

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.

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

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

Comments:

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 Multiple TU's will usually be sent on each 867!!! REF*TU*51*K1MON

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identi Code qualifying the R	fication Qualifier eference Identification	<u>X12</u> M	2 Attributes ID 2/3
			TU	Trial Location Code		
				Used to indicate the type of metering will be sent on the 867 transaction.	inform	nation that
Must Use	REF02	127	Reference Identi	fication	X	AN 1/30
			Reference information Identification Qualifie	as defined for a particular Transaction Set or as spor	ecified b	by the Reference
			41	Off Peak		
			42	On Peak		
			43	Intermediate		
			51	Totalizer		
Must Use	REF03	352	Description A free-form description	n to clarify the related data elements and their conte	X ent	AN 1/80

Meter Type (see REF*MT for valid codes). "COMBO" is not a valid code for

this element.

QTY Quantity **Segment:**

Position: 110 Loop: QTY Level: Detail Usage: Optional

Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

Semantic Notes: 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

	Ref. Des.	Data <u>Element</u>	<u>Name</u>	Attributes
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
	•		Code specifying the type	of quantity
			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 M Code specifying the units has been taken	leasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			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	usage meets or exceeds a defined parameter Kilovolt Amperes Reactive Hour (KVARH)
			K3	•
			K3 K4	Kilovolt Amperes Reactive Hour (KVARH) Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined

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						
Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Name Measurement Qua Code identifying a spec	alifier ific product or process characteristic to which a me	O	ributes ID 1/3 nent applies
			PRQ	Consumption		
Must Use	MEA03	739	Measurement Val The value of the measure		X	R 1/20
			Represents quantity difference in the m various factors, exc			
Must Use	MEA04	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in wh has been taken			ID 2/2 h a measurement
			K1	Kilowatt Demand		
			K2	Represents potential power load meast predetermined intervals Kilovolt Amperes Reactive Demand	ired a	t
			K3	Reactive power that must be supplied of customer's equipment; billable when usage meets or exceeds a defined parak Kilovolt Amperes Reactive Hour	n kilo	watt demand
				Represents actual electricity equivalen hours; billable when usage meets or exparameters		
			K4	Kilovolt Amperes (KVA)		
			K5	Kilovolt Amperes Reactive		

			KH	Kilowatt Hour		
Must Use	MEA07	935	Measurement	Significance Code	0	ID 2/2
			Code used to b	enchmark, qualify or further define a n	neasuremen	t value
			41	Off Peak		
			42	On Peak		
			43	Intermediate		
			51	Total		
				Totalizer		
			66	Shoulder		

DTM Date/Time Reference (150=Service Period Start) **Segment:**

Position: 210 Loop: QTY Detail Level: Usage: Optional Max Use: 10

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

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

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

 $DTM \ {\tt Date/Time \ Reference} \ (151 = Service \ Period \ End)$ **Segment:**

Position: 210 Loop: QTY Detail Level: Usage: Optional Max Use: 10

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	$\overline{DTM01}$	374	Date/Time Qu	ualifier	M	ID 3/3
			Code specifying t	ype of date or time, or both date and time		
			151	Service Period End		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as	CCYYMMDD		

 $\textbf{Segment:} \quad \textbf{PTD} \text{ Product Transfer and Resale Detail (FG=Scheduling Determinants)}$

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

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	Product Transfer Type Code	M ID 2/2

Code identifying the type of product transfer

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.

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

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

Comments:

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:	Same as PA	
Example:	REF*LF*2	

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		Identification Qualifier g the Reference Identification	<u>X1</u> 2	2 Attributes ID 2/3
			LF	Load Planning Number Loss Factor		
Must Use	REF02	127		Identification rmation as defined for a particular Transaction Set or as sp Dualifier	X pecified	AN 1/30 by the Reference

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.

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

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

Comments:

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:	Required
MD Use:	Required
Example:	REF*LO*GS

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		Identification Qualifier ng the Reference Identification	<u>X12</u> M	2 Attributes ID 2/3
			LO	Load Planning Number		
				Load profile		
Must Use	REF02	127	Reference	Identification	X	AN 1/30
			Reference info	ormation as defined for a particular Transaction Set or as spe Oualifier	cified b	by the Reference

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.

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

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

Comments:

001111100			
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:	Required		
MD Use:	Required		
Example:	REF*NH*GS1		

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		entification Qualifier ne Reference Identification	Att M	ributes ID 2/3
			NH	LDC Rate Code		
Must Use	REF02	127	Reference Ide Reference information Qual	ation as defined for a particular Transaction S	X Set or as specified	AN 1/30 by the Reference

 $REF \ \ Reference \ Identification \ (PR=LDC \ Rate \ Sub-Class)$ **Segment:**

Position: 030 Loop: PTD Level: Detail Usage: Optional Max Use: 20

Purpose: To specify identifying information

Syntax Notes: 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: If maintained by utility, must be sent for each meter that is used for billing				
	purposes. This segment must also be sent when account has UNMETERED services				
	vailable for generation service.				
NJ Use:	Not Used				
DE Use:	Not Used				
MD Use:	Not Used				
Example:	REF*PR*123				

Data Element Summary

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

Code qualifying the Reference Identification

PR Price Ouote Number

LDC Rate Subclass – Used to provide further

classification of a rate.

Must Use REF02 127 **Reference Identification** \mathbf{X} AN 1/30

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

Identification Qualifier

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.

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

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

Comments:

PA Use:	Required for PJM participants
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	REF*BF*15

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		lentification Qualifier the Reference Identification	Att M	ributes ID 2/3
			BF	LDC Bill Cycle		
Must Use	REF02	127	Reference Information Quantification	mation as defined for a particular Transaction Set or a	X s specified 1	AN 1/30 by the Reference

 $\mathbf{REF}\ \mathbf{Reference}\ \mathbf{Identification}\ (\mathbf{SV}\text{=}\mathbf{Service}\ \mathbf{Voltage})$

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.

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

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

Comments:

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

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		dentification Qualifier g the Reference Identification	<u>X12</u> M	2 Attributes ID 2/3
			SV	Service Charge Number		
				Service Voltage		
Must Use	REF02	127		dentification	X	AN 1/30

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)

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.

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

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

Comments:

PA Use:	Not Used
NJ Use:	Optional, same as MD
DE Use:	Optional, same as MD
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

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		ntification Qualifier Reference Identification	Attributes M ID 2/3
			MG	Meter number	
Must Use	REF02	127	Reference Identification X AN Reference information as defined for a particular Transaction Set or as specified by the Identification Qualifier		
			1METER - 0	Only one meter on the account	
			MULTIPLE - 1	Multiple meters on the account	
			UNMETERED	- unmetered service only	

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.

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

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

Comments:

PA Use:	Required when special meter configuration is present on an account.
NJ Use:	Same as PA
	Note: NJ LDCs to send 'NETMETER' in REF02
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*KY* NSUN*0000026

Data Element Summary

			Dutu Lich	nent Summary
	Ref.	Data	Nome	V12 Attuikuto
Manat IIaa	Des.	Element 129	Name	X12 Attribute
Must Use	REF01	128	Reference Identif	_
			Code qualifying th	e Reference Identification
			KY	Site Specific Procedures, Terms, and Conditions
				Special Meter Configuration
Must Use	REF02	127	Reference Identif	ication X AN 1/30
				tion as defined for a particular Transaction Set or as eference Identification Qualifier
			ASUN	_
			ASUN	Net Metering Solar
			AWIN	Net Metering Wind Net Metering Hydro
			ABIO	Net Metering Hydro 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)
	REF03	352	Description	X AN 1/80
Optional				

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

 $\textbf{REF} \ \textbf{Reference Identification} \ (\textbf{AN=Aggregate Net Energy Meter Role})$

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.

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

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

Comments:

PA Use:	Conditional - Required when the customer account is part of an Aggregate Net Energy Meter family. (FirstEnergy only)
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Conditional - Required when the customer account is part of an Aggregate Net Energy Meter family or Community Solar program. NOTE: Community Solar requirement is for FirstEnergy (Potomac Edison) only.
Example:	REF*AN* PARENTHOST

	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>			Attributes
Must Use	REF01	128	Reference Identific	cation Qualifier	M	ID 2/3
			Code qualifying the AN	Reference Identification Aggregate Net Energy Meter Role The role of the customer account in the	e Agg	regate Net
				Energy Meter family		
Must Use	REF02	127	Reference Identific	cation	X	AN 1/30
				the Reference Identification Qualifier HOST BGE & FE: Host Account with Generation PHI: Customer designated primary host (parent Generation BGE & FE: Not Used PHI: Host account with generation, not the print		rent) with
			CHILD	Child account, may or may not have its NOTE - The REF*KY segment is used account has its own generation.		
			GENERATOR	FE: Community Solar Host Account v BGE & PHI: Not Used	vith C	Generation
			SUBSCRIBER	FE: Community Solar Child Account BGE & PHI: Not Used		

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.

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

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

Comments:

PA Use:	Not Used
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Required
Example:	REF*EA*Y
	REF*EA*N

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	<u>Name</u> Reference Ide	entification Qualifier	<u>X1</u> 2	2 Attributes ID 2/3
			Code qualifyii	ng the Reference Identification		
			EA	Energy Assistance Customer		
				Used to indicate customer's Energy A	ssista	nce status at
				the time of request		
Must Use	REF02	127	Reference Ide	entification	X	AN 1/30
				ormation as defined for a particular Transactione Reference Identification Qualifier	on Set	t or as
			Y	Customer is on Energy Assistance		
			N	Customer is not on Energy Assistance	;	

 $\begin{picture}(0,0) \put(0,0) \put(0,0)$ **Segment:**

Position: 110 Loop: QTY Level: Detail Usage: Optional Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

Semantic Notes: QTY04 is used when the quantity is non-numeric.

Comments.

Comments:					
Notes:	Each QTY/MEA/DTM loop conveys consumption information about one metering period.				
PA Use:	Required for PJM participants. 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. 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				
	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				
NJ Use:	Required. For the Peak Load Contribution in effect when the transaction is requested. Required for the Future Peak Load Contribution for JCPL when calculated and available. See PA Notes for implementation.				
	NJ Note: PSE&G sends Capacity Obligation to PJM and suppliers.				
DE Use:	Same as NJ				
MD Use:	Required. This will be the Peak Load Contribution in effect when the transaction is requested. Potomac Edison – follows PA use of effective dates where Future Peak Load Contribution is sent when calculated and available.				
Example:	QTY*KC*752*K1				
	VII 100 102 111				

Data Element Summary

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	Name Quantity Qualifier Code specifying the type	Attributes M ID 2/2 of quantity
			KC	Net Quantity Decrease
				Peak Load Contribution: Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM Peak).
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	Heasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			K1	Kilowatt Demand
				Represents potential power load measured at

predetermined intervals

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.

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
	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.
	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
	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
NJ Use:	Required for JCPL. Optional for other NJ EDCs. See PA Notes for implementation.
DE Use:	Not Used
MD Use:	Required for Potomac Edison. Optional for other MD LDCs. See PA Notes for implementation.
Example:	DTM*007****RD8*20070601-20080531

	Ref. Des.	Data <u>Element</u>	Name	circ Summary	Att	<u>ributes</u>
Must Use	DTM01	374	Date/Time Qualified Code specifying type	er e of date, or time, or both date and time	M	ID 3/3
Must Use	DTM05	1250	007 Date/Time Period F Code indicating the	Effective PLC Effective Date format Qualifier date format, time format, or date and ti	X me fo	ID 2/3 rmat
Must Use	DTM06	1251	RD8 Date/Time Period Expressed as CCYY	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD	X	AN 1/35

 $\ QTY \ \ {\it Quantity} \ ({\it KZ=Network Service Peak Load})$ **Segment:**

Position: 110 Loop: QTY Level: Detail Usage: Optional Max Use:

Purpose: To specify quantity information **Syntax Notes:** At least one of QTY02 or QTY04 is required.

QTY*KZ*752*K1

Only one of QTY02 or QTY04 may be present.

QTY04 is used when the quantity is non-numeric.

Semantic Notes: Comments:

Each QTY/MEA/DTM loop conveys consumption information about one metering interval.
Required for PJM participants. 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 The effective dates for PA EDC implementation is as follows: First Energy, PECO, & PPLEU: must support NLT 5/10/2013. Duquesne: will support NLT 1/31/2014
Required. This will be the Network Service Peak Load in effect when the transaction is requested. NJ Note: PSE&G sends Transmission Load to PJM and suppliers.
Same as NJ
Required. This will be the Network Service Peak Load in effect when the transaction is requested. Potomac Edison – follows PA use where Future Network Service Peak Load is sent when calculated and available.

Data Element Summary

Must Use	Ref. <u>Des.</u> QTY01	Data <u>Element</u> 673	Name Quantity Qualifier Code specifying the type	
			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).
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	Teasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			K1	Kilowatt Demand
				Represents potential power load measured at predetermined intervals

Example:

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.

- 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:	Optional. See PA Notes for implementation.
DE Use:	Not Used
MD Use:	Required for Potomac Edison. Optional for other MD LDCs. See PA Notes for implementation.
Example:	DTM*007****RD8*20070601-20080531

	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>		Att	<u>ributes</u>
Must Use	DTM01	374	Date/Time Qualifie		M	ID 3/3
			Code specifying typ	e of date, or time, or both date and time		
			007	Effective		
				NSPL Effective Date		
Must Use	DTM05	1250	Date/Time Period F	ormat Qualifier	\mathbf{X}	ID 2/3
			Code indicating the	date format, time format, or date and tir	ne fo	rmat
			RD8	Range of Dates Expressed in Format		
				CCYYMMDD-CCYYMMDD		
Must Use	DTM06	1251	Date/Time Period		X	AN 1/35
			Expressed as CCYY	MMDD-CCYYMMDD		

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*000000001

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

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
REF*PR*RESNH7187	LDC Rate Sub-Class
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

Example: Pennsylvania, Maryland & New Jersey Net Metering / Customer Generation

Historical Usage Summarized by Account – with Net Metering (Excluding FirstEnergy in PA)

BPT*52*2012070112300001*20120701*DD	Transaction Set Purpose Code: 52, Response to Historical Inquiry Reference Identification: 2012070112300001, Transaction Date: 20120701, Report
	Type Code: DD , Usage
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
PTD*SU	Summary Loop for kwh
QTY*QD*1944*KH	Net Consumption Quantity (kwh)
DTM*150*20120529	Service Period Start
DTM*151*20120630	Service Period End
QTY*87*311*KH	Net Generation Quantity (kwh)
DTM*150*20120427	Service Period Start
DTM*151*20120529	Service Period End
QTY*87*871*KH	Net Generation Quantity (kwh)
DTM*150*20120327	Service Period Start
DTM*151*20120427	Service Period End
QTY*QD*2166*KH	Net Consumption Quantity (kwh)
DTM*150*20120227	Service Period Start
DTM*151*20120327	Service Period End
PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
REF*KY*ASUN	Special Meter Configuration
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

Historical Usage Summarized by Rate – with Net Metering (PECO)

BPT*52*2012070112300001*20120701*DD	Transaction Set Purpose Code: 52, Response to Historical Inquiry
	Reference Identification: 2012070112300001, Transaction Date: 20120701, Report
M140041 D.C. COMPANIA 4007000411	Type Code: DD , Usage
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1 N1*8R*JANE DOE	ESP Company Customer name
REF*11*8645835	ESP Account Number
REF*12*519703123457	LDC Account Number
REF*45*451105687500	Old LDC Account Number
PTD*RT	Rate Summary Loop for kwh
REF*LO*RS	Load Profile
REF*NH*RESNH	LDC Rate Code
QTY*QD*1944*KH	Net Consumption Quantity (kwh)
DTM*150*20120529	Service Period Start
DTM*151*20120630	Service Period End
QTY*87*311*KH	Net Generation Quantity (kwh)
DTM*150*20120427	Service Period Start
DTM*151*20120529	Service Period End
QTY*87*871*KH	Net Generation Quantity (kwh)
DTM*150*20120327	Service Period Start
DTM*151*20120427	Service Period End
QTY*QD*2166*KH	Net Consumption Quantity (kwh)
DTM*150*20120227	Service Period Start
DTM*151*20120327	Service Period End
PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
REF*KY*ASUN	Special Meter Configuration
REF*LF*2	Loss Factor (FE Only; optional others)
REF*SV*SECONDARY	Service Voltage (FE Only; optional others)
QTY*KC*752*K1	Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load

Historical Usage Summarized by Meter - with Net Metering

Instorted Csage Building Tzed by Weter	with fiet wittering
BPT*52*2012070112300001*20120701*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 2012070112300001 , Transaction Date: 20120701 , 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
PTD*PM	Summary Loop for kwh
REF*MG*M1234567	Meter Number
REF*MT*KHMON	Meter Type
REF*TU*51*KHMON	TOU Value
QTY*QD*1944*KH	Net Consumption Quantity (kwh)
MEA**PRQ*1944*KH***51	TOU indicator
DTM*150*20120529	Service Period Start
DTM*151*20120630	Service Period End
QTY*87*311*KH	Net Generation Quantity (kwh)
MEA**PRQ*311*KH***51	TOU indicator
DTM*150*20120427	Service Period Start
DTM*151*20120529	Service Period End

QTY*87*871*KH	Net Generation Quantity (kwh)
MEA**PRQ*871*KH***51	TOU indicator
DTM*150*20120327	Service Period Start
DTM*151*20120427	Service Period End
QTY*QD*2166*KH	Net Consumption Quantity (kwh)
MEA**PRQ*2166*KH***51	TOU indicator
DTM*150*20120227	Service Period Start
DTM*151*20120327	Service Period End
PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
REF*KY*ASUN	Special Meter Configuration
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

with Net Metering (PSE&G New Jersey)
Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 2012070112300001 , Transaction Date: 20120701 , Report
Type Code: DD , Usage
LDC Company
ESP Company Customer name
ESP Account Number
LDC Account Number
Summary Loop for kwh
Billed usage (kwh)
Actual Consumption (kWh)
Service Period Start
Service Period End
Billed usage (kwh)
Actual Consumption (kWh)
Service Period Start
Service Period End
Billed usage (kwh)
Actual Consumption (kWh)
Service Period Start
Service Period End
Billed usage (kwh)
Actual Consumption (kWh)
Service Period Start
Service Period End
Scheduling Determinants Loop
Bill Cycle
LDC Rate Code
Peak Load Contribution
Network Service Peak Load

Historical Usage Summarized by Account – with Net Metering (FirstEnergy in PA Only)

BPT*52*201903140404550002229777*20190314*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 201903140404550002229777 , Transaction Date: 20190314 , 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
PTD*SU	Summary Loop for kwh
REF*6W*1	Channel Number
QTY*KA*37.0000000*KH	Billed usage (kwh)
DTM*150*20180309	Service Period Start
DTM*151*20180409	Service Period End
OTY*OD*998.0000000*KH	Billed usage (kwh)
DTM*150*20180410	Service Period Start
DTM*151*20180507	Service Period End
OTY*OD*753.0000000*KH	Billed usage (kwh)
DTM*150*20180508	Service Period Start
DTM*151*20180607	Service Period End
OTY*OD*1052.0000000*KH	Billed usage (kwh)
DTM*150*20180608	Service Period Start
DTM*151*20180709	Service Period End
PTD*SU	Summary Loop for kwh
REF*6W*2	Channel Number
OTY*9H*7.0000000*KH	Billed usage (kwh)
DTM*150*20180309	Service Period Start
DTM*151*20180409	Service Period End
OTY*87*98.0000000*KH	Billed usage (kwh)
DTM*150*20180410	Service Period Start
DTM*151*20180507	Service Period End
OTY*87*53.0000000*KH	Billed usage (kwh)
DTM*150*20180508	Service Period Start
DTM*151*20180607	Service Period End
OTY*87*105.0000000*KH	Billed usage (kwh)
DTM*150*20180608	Service Period Start
DTM*151*20180709	Service Period End
PTD*FG	Scheduling Determinants Loop
REF*BF*68	Bill Cycle
REF*LO*RESNH	LDC Load Profile
REF*NH*ME-RSD	LDC Rate Class
REF*SV*Secondary, voltage unknown	Service Voltage
REF*LF*1.071800	Loss Factor
QTY*KC*2.5369000*K1	Peak Load Contribution
DTM*007****RD8*20180601-20190531	Effective Date of Peak Load Contribution
QTY*KC*2.3475000*K1	Peak Load Contribution
DTM*007****RD8*20190601-20200531	Effective Date of Peak Load Contribution
QTY*KZ*3.3045000*K1	Network Service Peak Load
DTM*007****RD8*20190601-20200531	Effective Date of Network Service Peak Load

Example: Pennsylvania Effective Dates for PLC/NSPL

Historical Usage Summarized by Account – 867HU requested prior to new PLC value taking effect, both PLC values are in LDC system, sent with their applicable effective dates.

BPT*52*2012040112300001*20120401*DD	Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 2012040112300001 , Transaction Date: 20120401 , Report
	Type Code: DD , Usage
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
PTD*SU	Summary Loop for kwh
QTY*QD*1944*KH	Consumption Quantity (kwh)
DTM*150*20120529	Service Period Start
DTM*151*20120630	Service Period End
QTY*QD*311*KH	Consumption Quantity (kwh))
DTM*150*20120427	Service Period Start
DTM*151*20120529	Service Period End
QTY*QD*871*KH	Consumption Quantity (kwh)
DTM*150*20120327	Service Period Start
DTM*151*20120427	Service Period End
QTY*QD*2166*KH	Consumption Quantity (kwh)
DTM*150*20120227	Service Period Start
DTM*151*20120327	Service Period End
PTD*FG	Scheduling Determinants Loop
REF*BF*01	Bill Cycle
REF*LF*2	Loss Factor (FE Only; optional others)
REF*KY*ASUN	Special Meter Configuration
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 - CURRENT
DTM*007****RD8*20110601-20120531	Effective Date of Peak Load Contribution
QTY*KC*787*K1	Peak Load Contribution - FUTURE
DTM*007****RD8*20120601-20130531	Effective Date of Peak Load Contribution
QTY*KZ*752*K1	Network Service Peak Load
DTM*007****RD8*20120101-20121231	Effective Date of Network Service Peak Load
	Literary Date of Network Service Leak Load