Pennsylvania New Jersey Delaware Maryland

Implementation Guideline

Electronic Data Interchange

TRANSACTION SET

867
Interval Usage
Ver/Rel 004010

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	Summary of Changes
December 21, 1998 Version 1.0	Initial release.
January 7, 1999 Version 3.3	 Fixed footer to read PA867IU Added additional types of quantity qualifiers to satisfy Co-generation needs – this allows reporting of the meter receiving quantity from the co-generation site. Added Clarification to use of Power factor. Clarified use of QTY/MEA segments in the Interim Account Services Summary Loop ("SU").
February 10, 1999 Version 3.4	 Corrected to include REF segment for meter type in BO, PM, BQ, IA, and IB loops. This is needed to report interval size. Add D8 as an option for DTM06 in the SU loop. This is needed for the Interim Solution when interval data is not being sent. If interval data is being sent, DTM06 must be set to DT.
August 10, 1999 Version 3.5a	 Initial changes for version 4010 Added NJ and Delaware (Delmarva) to the document
September 8, 1999 Version 3.5b	 Added Note clarifying use of explicit date/timestamp with every interval for Pennsylvania. Added note clarifying use of BB loop (required in PA, optional in NJ/DE (Delmarva)) Formatting changes Changed all headers to the true X12 definition correcting some mistakes that were missed in the upgrade from Version 3070 to Version 4010. Also corrected the Table on Page 4 to reflect X12 definitions and added the words "X12 Structure" to the title on that page.
September 15, 1999 Version 3.5c	 Added QTY01=96 in PM, BQ, and IB loops to indicate when quantity reading is provided for a period outside of the actual billing period. This is used when a compan always sends an entire day's worth of readings, but not all readings on the start date and end date are within the current bill period. Removed Timestamp and Zone from the DTM in location 020 in all loops. Only the Date is used in this location. The Date, Time, and Zone are valid for all DTM segmen in position 210. Added clarification as to what document will be used by each Pennsylvania utility when the 4010 changes are implemented in November 1999.
October 1, 1999 Version 3.5d	 Added REF*BLT and REF*PC for PA. Note: Due to the late date this is being added, all companies may not be able to compare with it until some later date. Note: The use of these segments will have to be discussed in NJ and DE (Delmarva) Made BB loop mandatory for New Jersey and Delaware
November 4, 1999 Version 3.6	This is a FINAL version for Pennsylvania and New Jersey
April 20, 2000 Version 3.6MD1	 Add Table of contents Add Data Dictionary Add Maryland to document Update PA use of 867 document for interval
June 26, 2000 Version 3.6MD2	 Corrections to TOC Corrected some data types in data dictionary Added clarity to some of the data dictionary fields Added clarity to PTD loops on relevance of "use" column
August 14, 2000 Version 3.6MD3	 Add New Jersey Notes section Add Note for PSE&G on BPT07 Add clarity to PTD segments in regards to the "Use" within the segments in that specific loop.

September 10, 2000 Version 3.7	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware (Delmarva only).
October 19, 2001 Version 3.7rev01	 Incorporate Delaware Electric Coop (DEC) information for Delaware Incorporate PA Change Control 030. Add clarity when canceling a transaction that only specific loops are required: for interval ACCOUNT level - BB and SU; for interval METER level – BB and BO
December 13, 2001 Version 3.7rev02	 Incorporate PA Change Control 038 – change all references of PPL to PPL EU. Incorporate PA Change Control 038 – change PPL EU's use of the 867IU Add clarification to NJ Notes section for PSE&G regarding support of detail interval data (summary level not an option). Also add PSE&G clarification on cancel / rebills for supplier other than supplier of record. Remove note indicating PSE&G does not support cross reference to the 810.
January 9, 2002 Version 4.0	• Incorporate SMECO specifics for MD (MD Change Control 003) This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
May 2004 Version 4.0.1D	Allow combined interval / non-interval meters on one transaction for NJ
August 4, 2004 Version 4.0.2.D	 Review current PA practices for sending interval data – all changes made to the Pennsylvania Notes section
January 20, 2006 Version 4.0.3D	 Incorporate NJ Change Control 005 (NJ CleanPower program changes). Add N1*G7 segment. Incorporate NJ Change Control 006 (Update txn to reflect current practices)
October 23, 2006 Version 4.0.4D	 Incorporate NJ Change Control 008 to reflect NJ CleanPower – unmetered usage for RECO) Incorporate NJ Change Control 009 to reflect NJ CleanPower change for partial usage. Add clarifying notes for NJ Net Metering.
February 12, 2007 Version 4.0.5F	Considered FINAL for PA and NJ
February 22, 2009 Version 4.0.6D	 Incorporate NJ Change Control PSEG-E-IU to reflect PSEG will send REF*45 as applicable. Allow sending of REF*6W for channel for net metered accts
January 24, 2010 Version 4.1	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
September 8, 2010 Version 4.1.1D	 Incorporate PA Change Control 060 – (PA Admin/Cleanup) Incorporate MD Change Control – Admin (Admin/Cleanup for MD)
February 28, 2011 Version 5.0	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
February 16, 2012 Version 5.01	Incorporate PA Change Control 77 (Add QTY01 Codes) Incorporate PA Change Control 82 (Add/update QTY01 Codes) Incorporate MD Change Control 010 (PEPCO AMI/Smart Meter 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 Incorporated PA Change Control 103 (uniform net meter consumption reporting) Incorporated MD Change Control 016 (add BC loop for MD use) Removed IA/IB loops, region confirmed not used.

General Notes

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.

Cross Reference Number between 867, 810, and 820 There is a cross reference between billing related documents.

- 867 BPT02 This document establishes the cross reference number.
- 810 BIG05 This document must have the cross reference number from the respective 867.
- 820 REF6O (letter O) When making the other party whole, the 820 to the non-billing party must also include the cross reference number from 867/810 document.

PTD Definition and Use:

The PTD Loops are required. Some are used individually, others are used in pairs. This section describes the purpose of each PTD loop. Depending on the characteristics of the account, there may be a different number of loops.

<u>Monthly Billed Summary Information</u> (PTD=BB): This loop is always required for every type of account if the LDC reads the meter. See description of BB loop for applicability in each states.

Monthly Billed Summary (**PTD01=BB**): One PTD per Account – Data obtained from the billing system to reflect the billing data for this account.

<u>Metered Services Information – by Meter:</u> (PTD01 = BO and PM)

Metered Services Summary (PTD01=BO): Sums intervals by meter by unit of measure. For each meter provided in the detail, there must be one summary loop for a kwh or kvarh unit of measurement. Data is obtained from the metering system.. The PTD01=BO provides control totals for the sum of all intervals in the PTD01=PM by unit of measure and meter. However, the PTD01=BO loop will NEVER be provided for kW or KVAR. For instance, if there are two meters on the account, one of which measures KW and kwh and the other of which measures kwh, there will be two PTD01=BO for the summary kwh information and three PTD01=PM loops.

Metered Services Detail (PTD01=PM): One or more PTDs, one for each unit of measure for each meter. Data is obtained from the metering system. Individual intervals are provided in the PTD01=PM

PTD Definition and Use: (continued)

Account Services Information – by Account: (PTD01 = SU and BQ)

Account Services Summary (PTD01=SU): Summing to the account level by kWh and KVARH. Data is obtained from the metering system. For every PTD01=SU, there must be a PTD01=BQ. The PTD01=SU loop will NEVER be provided for kW or KVAR. This is typically used when the account has a Data Recorder or Load Profile Recorder, or the metering system can sum information to the account level.

Account Services Detail (PTD01=BQ): One or more PTDs, one for each unit of measure. Data is obtained from the metering system. Individual intervals are provided in the PTD01=BQ loop. If the account measures KW and kwh, there will be one PTD loop for the kwh intervals and one PTD loop for the KW intervals.

<u>Unmetered Services Information</u> (PTD01 = BC) – This loop is used to convey the usage for any unmetered portion of an account. This information must be provided at the summary level (PTD01=BC). [Maryland only]

Unmetered Services Summary (PTD01=BC): Total Consumption for all unmetered services at the account level. Even though some of the consumption may be estimated, the consumption is reported as actual for unmetered services. The summary is required for Unmetered Services. [Maryland only]

Valid Loop Combinations:

There are several valid combinations of the use of the different PTD loops when EDC is the metering agent:

<u>Combination # 1 – Interval **Account** Level Reporting (intervals are summed to ACCOUNT level)</u>

- Monthly Billed Summary (PTD01=BB) if required by state
- Account Services Summary (PTD01=SU)
- Account Services Detail (PTD01=BQ) [not required on a cancel]

<u>Combination # 2 – Interval Meter Level Reporting (intervals are provided at meter level)</u>

- Monthly Billed Summary (PTD01=BB) if required by state
- Meter Services Summary (PTD01=BO)
- Meter Services Detail (PTD01=PM) [not required on a cancel]

<u>Combination #3 – Interval / Non-Interval Meter Level Reporting (intervals are provided at meter level)</u>

- Monthly Billed Summary (PTD01=BB) if required by state
- Meter Services Summary (PTD01=BO) (Sum of interval meters)
- Meter Services Detail (PTD01=PM) (interval meters)[not required on a cancell
- Meter Services Summary (PTD01=BR) (Sum of non-interval meters)
- Meter Services Detail (PTD01=PL) (non-interval meters)

Note: For cancel transactions, the account and summary loop information is sent; however, it is optional to include the PM and BQ loops. The PTD loop may be sent in any order. Order Loops are sent

Pennsylvania Notes

What document is sent if supplier elects NOT to receive detail interval data? If a supplier elects to receive only summary level information for an interval account, they will receive an 867MU document.

The 867IU document will be used when interval detail and summary level data is being sent. Listed below are the plans, by utility, of the information to be sent for summary and detail transaction.

- Duquesne Will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and PM loops (BPT04 will be "X5").
- FIRST ENERGY Will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and PM loops (BPT04 will be "X5").
- PECO Will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and PM loops (BPT04 will be "C1").
- PPL EU Will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB and SU loops (BPT04 will be "DD")
- UGI No Interval Usage Customers

Use of date/timestamp with every interval:

All utilities provide a timestamp with each interval.

Requirements for uniform support of Net Metered Customers:

Interval Metered - ACCOUNT Level Detail – all meters summarized (DLC, FE, PPL, and PECO)

- BB (Monthly Billed Summary) Loop reports the monthly billed summary usage for net metered customers.
 - 1. When customer's consumption is greater than generation, the billed KH usage in the QTY02 will be reported as net KH (generation subtracted from total consumption).
 - 2. When customer's generation is greater than consumption, the billed usage in the OTY02 will be reported as 0 (zero) KH.
 - 3. In either scenario, the QTY02 will never be signed negative.
- SU (Account Services Summary) Loop reports the summary usage for net metered customers by unit of measure.
 - 1. When the customer's consumption is greater than generation, 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, the KH will be reported as net generation (actual = 87 or estimated = 9H) with the total consumption subtracted from total generation).
 - 3. In either scenario, the QTY02 will never be signed negative.
- BQ (Account Services Detail) Loop reports the account level detail KH for net metered customers and will be looped for each unit of measure.
 - 1. The QTY02 will report the net KH for ALL metered services being summed to the account level.
 - 2. If the net KH for a given report period is generation, the QTY01 will be either '87' or '9H'.
 - 3. However if the total account's customer generation is less than consumption for a single reporting period, only the net consumption is sent with QTY01 qualifier of as consumption, non-billable, incomplete, or unavailable.

Requirements for

uniform support of Net Metered Customers (continued):

Interval Metered – METER Level Detail – each meter reported separately. (used by PECO only if EGS requests meter detail via 814E/C)

- BB (Monthly Billed Summary) Loop reports the monthly billed summary usage for net metered customers.
 - 1. When customer's consumption is greater than generation, the billed KH usage in the QTY02 will be reported as net KH (generation subtracted from total consumption).
 - 2. When customer's generation is greater than consumption, the billed usage in the QTY02 will be reported as 0 (zero) KH. I
 - 3. In either scenario, the QTY02 will never be signed negative
- BO (Meter Services Summary) Loop –sums intervals by meter by unit of measure.
 Each meter will have its own associated BO loop. Provides control totals for the sum of all intervals in the PM loops.
 - 1. When the customer's consumption is greater than generation, the KH will be reported as net consumption (QTY01 w/actual = QD or estimated = KA) with the total generation subtracted from total consumption. The meter role (REF*JH) will be Additive.
 - 2. When the customer's generation is greater than consumption, the KH will be reported as net generation (actual = 87 or estimated = 9H) with the total consumption subtracted from total generation). The meter role (REF*JH) will be subtractive.
 - 3. In either scenario, the QTY02 will never be signed negative
- PM (Meter Services Detail) Loop SINGLE meter reporting in/out flow. The meter loop will report the meter level detail KH for net metered customers via a single meter reporting both in and out flow. PM is looped for each meter and each unit of measure. Currently NOT used by any PA EDC.
 - 1. When the quantity for a given report period (interval reading) is generation, the quantity qualifier (QTY01) will be either '87' or '9H'. Otherwise, the QTY01 will be reported as consumption, non-billable, incomplete, or unavailable.
 - 2. The QTY02 will never be signed negative
- PM (Meter Services Detail) Loops SEPARATE meters, one reporting inflow and another meter reporting outflow. The PM loop will be repeated for each unit of measure, one meter reporting consumption and one meter reporting generation. Used by PECO only.
 - 1. The meter number should be unique for each KH loop. The meter attributes for each KH loop may have different values.
 - 2. The QTY02 will never be signed negative.

New Jersey Notes

What document is sent if supplier elects NOT to receive detail interval data? The standard method for interval accounts is to always pass interval data.

- JCP&L JCP&L will allow the summary option under the same guidelines they use in PA. JCP&L will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and PM loops (BPT04 will be "X5").
- Atlantic City Electric will allow a summary option. Atlantic City Electric will provide
 detail interval data using 867IU with BB, SU, and BQ loops. If summary level is
 requested, will provide an 867MU with BB, SU, and PM loops.
- PSE&G will not support supplier having a choice to receive summary only.

Cancel / Re-bill when supplier is no longer active supplier PSE&G cannot provide consolidated billing for ESP's who are not supplier of record at the time the cancel / re-bill is processed. The process for Cancel/ Re-bill for an ESP who is not customer's current supplier of record is:

- PSE&G will cancel charges from 810(s) that correspond to the original 867(s) being canceled.
- Send 867(s) cancel
- Send 867(s) re-bill noting that customer billing option is DUAL.
- PSE&G will issue an 820 and reduce a future payment by the amount of the canceled 810(s) (on the scheduled date of the 820).
- TPS must Dual bill customer for the re-billed 867(s).

Net Metering:

- PSE&G- Is currently using meters that have different channels to capture inbound and outbound usage and will send inbound and outbound at the detail level, and the net in the billed summary loop.
- Atlantic City Electric- Is currently using watt-hour meters that go both ways ultimately providing the net usage to the EDI process. This is for both the TPSs as well as the Clean Power providers.
- JCP&L-Is currently using a bi-directional meter for both the TPS's as well as the Clean Power suppliers. The bi-directional meter is providing the in and the out reading to the EDI process. The EDI summary loop will include the net usage.
- RECO- (This section will be updated in the near future)

Maryland Notes

What document is sent if supplier elects NOT to receive detail interval data? If a supplier elects to receive only summary level information for an interval account, they will receive an 867MU document.

Note: Delmarva will not support supplier having a choice to receive summary only when the market opens.

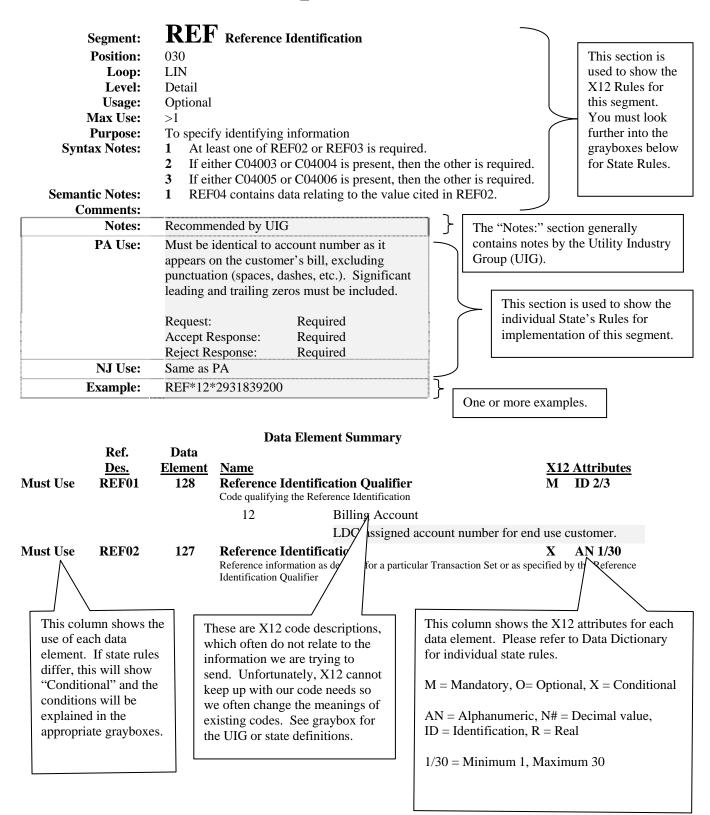
If a supplier elects to receive detail and summary level information for an interval account, this is what they will receive, by utility.

- Delmarva Supplier will receive 867IU for all accounts.
- BGE Supplier will receive 867MU for summary, and detail will be posted on their website
- PEPCO
 - Non-AMI/Smart meter billed accounts Supplier will receive 867MU summary and detail will be posted on website.
 - AMI/Smart Meter interval billed accounts Effective 4/1/2012, the supplier will receive 867IU (unless supplier has requested summary data). No smart meter billed account data will be present on the website.
- Potomac Edison Will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and PM loops (BPT04 will be "X5").

867IU Implementation Guide

Note: The 867IU Implementation Guide for "MD Use" does not pertain to BG&E since they will never send an 867IU transaction.

How to Use the Implementation Guideline



867 Product Transfer and Resale Report X12 Structure

Functional Group ID=PT

Heading:

	Pos. <u>No.</u>	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		
	050	DTM	Date/Time Reference	O	10		
	075	MEA	Measurements	O	20		
			LOOP ID – N1			5	
	080	N1	Name	О	1		
	120	REF	Reference Identification	O	12		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID – PTD			>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Monthly Billed Summary) – BB	M	1		
	020	DTM	Date/Time Reference	O	10		
			LOOP ID – QTY		·	>1	
	110	QTY	Quantity	О	1		
			LOOP ID – PTD	•	•	>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Meter Services Summary) – BO	M	1		
	020	DTM	Date/Time Reference	O	10		
	030	REF	Reference Identification	O	20		
			LOOP ID – QTY			>1	
	110	QTY	Quantity	O	1		
	160	MEA	Measurements	O	40		
							·
			LOOP ID – PTD		·	>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Meter Services Detail) – PM	M	1		
	020	DTM	Date/Time Reference	O	10		
	030	REF	Reference Identification	O	20		
			LOOP ID – QTY			>1	
	110	QTY	Quantity	O	1		
	210	DTM	Date/Time Reference	O	10		
							<u>.</u>
			LOOP ID – PTD			>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Non- interval Meter Services Summary) – BR	M	1		
	020	DTM	Date/Time Reference	O	10		
	030	REF	Reference Identification	O	20		

			LOOP ID – QTY			>1	
	110	QTY	Quantity	0	1		
	160	MEA	Measurements	O	40		
			LOOP ID – PTD		<u> </u>	>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Non-	M	1		
	020	DTM	Interval Meter Services Detail) – PL	0	10		
	020 030	DTM REF	Date/Time Reference Reference Identification	0	10 20		
	030	KEF	LOOP ID – QTY	0	20	>1	
	110	QTY	Quantity	O	1	>1	
	210	DTM	Date/Time Reference	0	10		
	210	DIM	Date/Time Reference		10		
			LOOP ID – PTD			\ 1	
Must Use	010	PTD	Product Transfer and Resale Detail (Account	M	1	>1	
Must Use	010	PID	Services Summary) – SU	IVI	1		
	020	DTM	Date/Time Reference	0	10		
			LOOP ID – QTY			>1	
	110	QTY	Quantity	О	1		
			LOOP ID – PTD			>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Account Services Detail) – BQ	M	1		
	020	DTM	Date/Time Reference	0	10		
	030	REF	Reference Identification	O	20		
			LOOP ID – QTY		•	>1	
	110	QTY	Quantity	0	1		
	210	DTM	Date/Time Reference	O	10		
							L
			LOOP ID – PTD			>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Residential	M	1		
	020	DTM	Meter Services Summary) – IA Date/Time Reference	O	10		
	030	REF	Reference Identification	0	20		
	030	KLI	LOOP ID – QTY			>1	
	110	QTY	Quantity	0	1	71	
	160	MEA	Measurements	0	40		
			LOOP ID – PTD	-	·	>1	
Must Use	010	PTD	Product Transfer and Resale Detail (Residential	M	1	/1	
	010		Meter Readings Detail) – IB				
	0.5.		Data/Pima Dafananaa				
	020	DTM	Date/Time Reference	0	10		
	020 030	REF	Reference Identification	0	20		
	030	REF	Reference Identification LOOP ID – QTY	О	20	>1	
	030 110	REF QTY	Reference Identification LOOP ID – QTY Quantity	0	20	>1	
	030	REF	Reference Identification LOOP ID – QTY	О	20	>1	
Summary	030 110 210	REF QTY	Reference Identification LOOP ID – QTY Quantity	0	20	>1	
Summary:	030 110 210	REF QTY DTM	Reference Identification LOOP ID – QTY Quantity	0 0 0	20		
Summary:	030 110 210	REF QTY	Reference Identification LOOP ID – QTY Quantity	0	20	>1 Loop Repeat	Notes and Comments

Data Dictionary

		867 Interval Usage			
Appl Field	Field Name	Description	EDI Segment	Related EDI Qualifier	Data Type
Header	Information				•
1	Purpose Code	00 – Original 01 – Cancellation – Cancels an entire Usage	BPT01		X(2)
2	Transaction Reference Number	Unique Number identifying this transaction assigned by the sender of the transaction. This number should be unique over all time. This number will also be shown on the related 810 document (both Bill Ready and Rate Ready), and for cases where the billing party makes the other party whole, on the 820 document.	BPT02		X(30)
3	System Date	Date that the data was processed by the sender's application system.	BPT03		9(8)
4	Report Type Code	C1- Cost Data Summary – Indicates this is an interval usage transaction.	BPT04	BPT01	X(2)
		DR – Transaction includes interval and non- interval data KH-Proposal Support Data-Meter Changeout			
		when Meter Agent Changes. Interval Usage (used to tell the receiver that this is a partial usage statement). The billing agent must combine the KH usage and the MV usage to determine total usage for period.			
5	Final Indicator	Indicates if this is a final reading for that particular ESP (e.g., customer moves, customer switches, etc.).	$\mathbf{BPT07} = \mathbf{F}$		X(1)
6	Transaction Reference Number	Transaction Reference Number echoed from BPT02 of the Original Transaction	BPT09		X(30)
7	Document Due Date/Time	The last date/time that information will be accepted by the billing party for processing the bill.	DTM02 (CCYYMM DD) and DTM03(HH	DTM01= 649	DTM02= 9(8) and DTM03= 9(4)
		If 810 is received after this date/time, and the billing party cannot process it, they must notify the non-billing party (via email, phone call, etc.)	MM)		,
8	Percent Participation	Used to express the percentage of the total load that is being supplied by the ESP. This is the multiplication of two fields that are on the 814 transaction, AMT*7N (Participating Interest) and AMT*QY (Eligible Load).	MEA03	MEA02 = NP	9(1).9999 9
9	LDC Name	LDC's Name	N102	N1: N101 = 8S	X(60)
10	LDC Duns	LDC's DUNS Number or DUNS+4 Number	N104	N1: N101 = 8S N103 = 1 or 9	X(13)

11	ESP Name	ESP's Name	N102	N1: N101 =	X(60)
12	ESP Duns	ESP's DUNS Number or DUNS+4 Number	N104	N1: N101 = SJ N103 = 1 or 9	X(13)
12.3	Renewable Energy Provider Name	Renewable Energy Provider 's Name	N102	N1: N101 = G7	X(60)
12.4	Renewable Energy Provider Duns	Renewable Energy Provider 's DUNS Number or DUNS+4 Number	N104	N1: N101 = G7 N103 = 1 or 9	X(13)
13	Customer Name	Customer Name	N102	N1: N101 = 8R	X(60)
14	ESP Account Number	ESP Customer Account Number	REF02	N1: N101*8R Loop REF01 = 11	X(30)
15	LDC Account Number	LDC Customer Account Number	REF02	N1: N101*8R Loop REF01 = 12	X(30)
15.2	LDC Account Number - unmetered	LDC Customer Account Number – Unmetered	REF03	N1: N101 = 8R REF01 = 12 REF03 = U	X(80)
16	Old Account Number	Previous LDC Customer Account Number	REF02	N1: N101*8R Loop REF01 = 45	X(30)
17	Billing Type	Indicates type of billing - LDC consolidated Billing (REF02=LDC) - ESP consolidated Billing (REF02=ESP) - Dual bills (REF02=DUAL)	REF02	LIN: REF01= BLT	X(4)
18	Billing Calculation Method	Indicates party to calculate bill LDC calculates bill (REF02=LDC) - Each calculate portion (REF02=DUAL)	REF02	LIN: REF01= PC	X(4)
Please	refer to General Notes	for details about the use of the PTD loop cor	nbinations.		
	<u> </u>	Billed Summary - Loop Required if the LDO			
		om the billing system to reflect billing data for t			
19	• • • • • • • • • • • • • • • • • • • •	Monthly Billed Summary	PTD01= BB	.	X(2)
20	Service Period Start Date	Start date of the period for which the readings are provided	DTM02	DTM01 = 150	9(8)
21	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = 151	9(8)
22	Quantity Qualifier	Represents that the quantity was billed: D1 - Billed	QTY01		X(2)
23	Quantity Delivered - Billed kWh	This data is taken from the LDC billing system and reflects the KWH amount on which the customer was billed.	QTY02	QTY01	9(10).9(4
24	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period. KH - Kilowatt Hours	QTY03		X(2)
25	Quantity Qualifier	Represents that the quantity was billed: D1 - Billed	QTY01		X(2)

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26	Quantity Delivered - Derived or Billed Demand	Demand for which the customer was actually billed at account level only. Derived or billed demand is different from measured demand because the result is based on contract demand or rate minimum demand.	QTY02	QTY01	9(10).9(4
27	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period. K1 - Demand (kW)	QTY03		X(2)
28	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)
29	Quantity Delivered - Measured or Registered Demand	Reflects what the meter actual shows (including all factors except Power Factor) and is provided at the account level only.	QTY02	QTY01	9(10).9(4)
30	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period. K1 - Demand (KW)	QTY03		X(2)
Meter	ed Services Summary ·	- Loop Required when the metering agent is r	eporting inte	rval data at th	e meter
		level.			
31	Product Transfer Type	Metered Services Summary	PTD01= BO		X(2)
32	Service Period Start Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = 150	9(8)
33	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = 151	9(8)
34	Meter Change Out Date	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.	DTM02	DTM01 = 514	9(8)
35	Meter Number	Serial number of this specific meter (may have multiple meters)	REF02	REF01 = MG	X(30)
36	Meter Role	Effect of consumption on summarized total. S = Subtractive (consumption subtracted from summarized total). A = Additive (consumption contributed to summarized total - do nothing). I = Ignore (consumption did not contribute to summarized total - do nothing	REF02	REF01 = JH	X(30)
37	Number of Dials / Digits and related decimal positions	Needed to determine usage if meter reading rolls over during the billing period. Number of dials on the meter displayed as the number of dials to the left of the decimal, a decimal point, and number of dials to the right of the decimal.	REF02	REF01 = IX	9.9
38	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	QTY01		X(2)

			<u> </u>	T	
		Meter)			
39	Quantity Delivered	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.	QTY02	QTY01	9(10).9(4
40	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)
41	Meter Multiplier	Meter Constant - used to represent how many units are reflected by one dial or digit increment.	MEA03	MEA02 = MU	9(9).9(4)
42	Power Factor	Relationship between watts and volt - amperes necessary to supply electric load	MEA03	MEA02 = ZA	9(9).9(4)
43	Transformer Loss Multiplier	Used when a customer owns a transformer and the transformer loss is not measured by the meter. Consumption figures from meter must be adjusted by this factor to reflect true end use consumption.	MEA03	MEA02 = CO	9(9).9(4)
Met	ered Services Detail - I	coop Required when the metering agent is rep		al data at the	meter
		level. [Loop not required on a cancel transa	ction]		
44	Product Transfer Type	Metered Services Detail	PTD01= PM		X(2)
45	Service Period Start Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = 150	9(8)
46	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = 151	9(8)
47	Meter Change Out Date	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.	DTM02	DTM01 = 514	9(8))
48	Meter Number	Serial number of this specific meter (may have multiple meters)	REF02	REF01 = MG	X(30)
49	Meter Type	Type of Meter	REF02	REF01= MT	X(5)
50	Quantity Qualifier	Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered 20 = Unavailable 87 = Actual Quantity Received (Net Meter) 96 = Non-Billable Quantity 9H = Estimated Quantity Received (Net Meter)	QTY01		X(2)
51	Quantity Delivered	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.	QTY02	QTY01	9(10).9(4
52	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)
	·		•		

53	Report Period Date/Time	The date/time of the end of the interval.	DD) and DTM03(HH	DTM01 = 582	DTM02= 9(8) and DTM03= 9(4)
54	Time Code	The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. ED = Eastern Daylight Time ES = Eastern Standard Time	MM DTM04		X(2)
M	letered Services Summ	ary - Loop required if there are non-interval	metered serv	rices on the acc	count
61	Product Transfer Type	Metered Services Summary	PTD01= BR		X(2)
62	Service Period Begin Date	Start date of the period for which the readings are provided	DTM02	DTM01 = 150	9(8)
63	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = 151	9(8)
64	Quantity Qualifier	Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered	QTY01		X(2)
65	Quantity Delivered	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings multiplied by various factors, excluding Power Factor.	QTY02	QTY01	9(10).9(4
66	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period. Only valid for KWH and KVARH.	QTY03		X(2)

Metered Services Detail - Loop Required if there are non-interval metered services on the account							
Product Transfer Type	Metered Services Detail	PTD01= PL		X(2)			
Service Period Begin	Start date of the service period of start date of	DTM02	DTM01 = 150	9(8)			
Date	the changed in meter.						
Service Period End	End date of the service period or end date of	DTM02	DTM01 = 151	9(8)			
Date	the changed out meter.						
Meter Change Out	Used in conjunction with either the Service	DTM02	DTM01 = 514	X(12)			
Date							
	for each period and meter.						
Meter Number	Serial number of this specific meter (may	REF02	REF01 = MG	X(30)			
	1						
LDC Rate Code		REF02	REF01 = NH	X(30)			
	Used to provide further classification of a rate.	REF02	REF01 = PR	X(30)			
Meter Role	*	REF02	$REF01 = \mathbf{JH}$	X(30)			
	Product Transfer Type Service Period Begin Date Service Period End Date Meter Change Out Date	Product Transfer Type Service Period Begin Date Start date of the service period or start date of the changed in meter. Service Period End Date End date of the service period or end date of the changed out meter. Weter Change Out Date Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter. Meter Number Serial number of this specific meter (may have multiple meters) LDC Rate Code Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site LDC Rate Subclass Code Used to provide further classification of a rate.	Product Transfer Type Metered Services Detail PTD01= PL Service Period Begin Date Start date of the service period or start date of the changed in meter. Service Period End Date End date of the service period or end date of the changed out meter. Service Period End Date End date of the service period or end date of the changed out meter. Meter Change Out Date Used in conjunction with either the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter. Meter Number Serial number of this specific meter (may have multiple meters) LDC Rate Code Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site LDC Rate Subclass Code Meter Role Effect of consumption on summarized total. S = Subtractive (consumption subtracted from summarized total). A = Additive (consumption contributed to summarized total - do nothing). I = Ignore (consumption did not contribute to	Product Transfer Type Metered Services Detail PTD01= PL Service Period Begin Start date of the service period or start date of the changed in meter. DTM02 DTM01 = 150 Service Period End End date of the service period or end date of the changed out meter. DTM02 DTM01 = 151 Meter Change Out Used in conjunction with either the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter. DTM02 DTM01 = 514 Meter Number Serial number of this specific meter (may have multiple meters) EDC Rate Code Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site Used to provide further classification of a rate. REF02 REF01 = PR LDC Rate Subclass Used to provide further classification of a rate. REF02 REF01 = PR LDC Rate Role Effect of consumption on summarized total. S = Subtractive (consumption subtracted from summarized total). A = Additive (consumption contributed to summarized total - do nothing). I = Ignore (consumption did not contribute to			

75	Number of Dials / Digits and related decimal positions	Needed to determine usage if meter reading rolls over during the billing period. Number of dials on the meter displayed as the number of dials to the left of the decimal, a decimal point, and number of dials to the right of the decimal.	REF02	REF01 = IX	9.9
76	Quantity Qualifier	Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered	QTY01		X(2)
77	Quantity Delivered	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.	QTY02	QTY01	9(10).9(4
78	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)
79	Measurement Reference Code	Code identifying category to which measurement applies.	MEA01		X(2)
80	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)
81	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
82	Beginning Reading	Value specifying beginning reading for the metering period. Factors have not been applied to this value.	MEA05		9(8).9(4)
83	Ending/Single Reading	The ending reading or single reading for metering period. Factors have not been applied to this value.	MEA06		9(8).9(4)
84	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)
815	Meter Multiplier	Meter Constant - used to represent how many units are reflected by one dial or digit increment.	MEA03	MEA02 = MU	9(9).9(4)
86	Power Factor	Relationship between watts and volt - amperes necessary to supply electric load	MEA03	$MEA02 = \mathbf{ZA}$	9(9).9(4)
87	Transformer Loss Multiplier	Used when a customer owns a transformer and the transformer loss is not measured by the meter. Consumption figures from meter must be adjusted by this factor to reflect true end use consumption.	MEA03	MEA02 = CO	9(9).9(4)

Ac	Account Services Summary - Loop required when the metering agent is reporting interval data at the account level.						
101	Product Transfer Type	Account Services Summary	PTD01= SU		X(2)		
102		Start date of the period for which the readings are provided	DTM02	DTM01 = 150	9(8)		

103	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = 151	9(8)
103.2	Meter Channel	Summarizes usage at the channel level	REF02	REF01= 6W	X(30)
104	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)
105	Quantity Delivered	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings multiplied by various factors, excluding Power Factor.	QTY02	QTY01	9(10).9(4
Acco	unt Services Detail - L	oop required when the metering agent is repolevel. [Loop not required on a cancel transaction.]		l data at the a	ccount
110	Product Transfer Type	Account Services Detail	PTD01 = BQ		X(2)
111	Service Period Start Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = 150	9(8)
112	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = 151	9(8)
113	Meter Type	Type of Meter	REF02	REF01= MT	X(5)
113.2	Meter Channel	Summarizes usage at the channel level	REF02	REF01= 6W	X(30)
114	Quantity Qualifier	Represents whether the quantity is actual or estimated: 17 = Incomplete Quantity Delivered 19 = Incomplete Quantity Received (Net Meter) 20 = Unavailable 87 = Actual Quantity Received (Net Meter) 96 = Non-Billable Quantity 9H = Estimated Quantity Received (Net Meter) KA = Estimated Quantity Delivered QD = Actual Quantity Delivered	QTY01		X(2)
115	Quantity Delivered	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.	QTY02	QTY01	9(10).9(4
116	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)
117	Report Period <u>Date/Time</u>	The date/time of the end of the interval.	DTM02 (CCYYMM DD) and DTM03(HH MM	DTM01 = 582	DTM02= 9(8) and DTM03= 9(4)
118	Time Code	The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. ED = Eastern Daylight Time ES = Eastern Standard Time	DTM04		X(2)

Residential Metered Services - Loop Required if this is a residential account.							
110	Due do et Tue e efe e Terre	[Loop not required on a cancel transacti	on] PTD01= IA	T	V(2)		
119	Product Transfer Type Service Period Start		DTM02	DTM01 =	X(2) 9(8)		
120	Date	the changed in meter.	DTWOZ	150	9(8)		
121	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = 151	9(8)		
122	Meter Change Out Date	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.	DTM02	DTM01 = 514	9(8))		
123	Meter Number	Serial number of this specific meter (may have multiple meters)	REF02	REF01 = MG	X(30)		
124	Meter Role	Effect of consumption on summarized total. S = Subtractive (consumption subtracted from summarized total). A = Additive (consumption contributed to summarized total - do nothing). I = Ignore (consumption did not contribute to summarized total - do nothing).	REF02	REF01 = JH	X(30)		
125	Number of Dials / Digits and related decimal positions	Needed to determine usage if meter reading rolls over during the billing period. Number of dials on the meter displayed as the number of dials to the left of the decimal, a decimal point, and number of dials to the right of the decimal.	REF02	REF01 = IX	9.9		
126	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)		
127	Quantity Delivered	,	QTY02	QTY01	9(10).9(4		
128	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)		
129	Measurement Reference Code	Code identifying category to which measurement applies.	MEA01		X(2)		
130	Unit of Measure	Unit of measure for readings.	MEA04		X(2)		
131	Beginning Reading	Value specifying beginning reading for the metering period. Factors have not been applied to this value.	MEA05		9(8).9(4)		
132	Ending/Single Reading	The ending reading or single reading for metering period. Factors have not been applied to this value.	MEA06		9(8).9(4)		
133	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)		
134	Meter Multiplier	Meter Constant - used to represent how many units are reflected by one dial or digit change.	MEA03	MEA02 = MU	9(9).9(4)		

135	Power Factor	Relationship between watts and volt - amperes necessary to supply electric load	MEA03	MEA02 = ZA	9(9).9(4)
136	Transformer Loss	When a customer owns a transformer and the transformer loss is not measured by the meter.	MEA03	MEA02 = CO	9(9).9(4)
	Multiplier Residential Me	ter Readings Detail - Loop Required if this i	s a residentia		
		[Loop not required on a cancel transacti	ion]		
137		Residential Meter Readings Detail	PTD01= IB		X(2)
138	Service Period Start Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = 150	9(8)
139	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = 151	9(8)
140	Meter Type	Type of Meter	REF02	NM1: REF01= MT	X(5)
141	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)
142	Quantity Delivered	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.	QTY02	QTY01	9(10).9(4
143	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)
144	Report Period <u>Date/Time</u>	The date/time of the end of the interval.	DTM02 (CCYYMM DD) and DTM03(HH MM	DTM01 = 582	DTM02= 9(8) and DTM03= 9(4)
145	Time Code	The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. ED = Eastern Daylight Time ES = Eastern Standard Time	DTM04		X(2)

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use:

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

Syntax Notes:

Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the

interchange partners to select the appropriate transaction set definition (e.g., 810

selects the Invoice Transaction Set).

Comments:

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

Must Use	Ref. <u>Des.</u> ST01	Data Element 143	Name Transaction Set Identifier Code Code uniquely identifying a Transaction Set	Att. M	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 se	M t function	AN 4/9 nal group assigned
			by the originator for a transaction set		

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

Position: 020

Loop:

Level: Heading Mandatory Usage:

Max Use:

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

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

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

3

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
Examples:	BPT*00*199902010001*19990131*C1 BPT*00*199902010001*19990131*C1***F BPT*01*199902020001*19990131*C1*****1999020100001 BPT*00*199902010001*19990131*DR

Data Element Summary

Must Use	Ref. <u>Des.</u> BPT01	Data Element 353	Name Transaction Set Pu Code identifying purpose			ributes ID 2/2
			00	Original		
				Conveys original readings for the accoureported.	nt be	ing
			01	Cancellation		
				Indicates that the readings previously re account are to be ignored.	porte	d for the
Must Use	BPT02	127	Reference Identific Reference information as Identification Qualifier		O fied by	AN 1/30 the Reference
	A unique transaction identification number assigned by the originator of transaction. This number must be unique over time.				ator of this	
				be used as a cross reference to the 810 biles that make the other party whole, it will 20.	_	
Must Use	BPT03	373	Date Date (CCYYMMDD)		M	DT 8/8
			Transaction Creation application system.	n Date – the date that the data is processe	d by	the
Must Use	BPT04	755	Report Type Code Code indicating the title	or contents of a document, report or supporting item	0	ID 2/2
			C1	Cost Data Summary		
			Indicates transaction is an Interval Data transaction. This will be used whether supplier is receiving summary			ng summary

data only, or both summary and detail interval data.

DR Datalog Report

Mixed Values - transaction contains data for both

interval and non-interval meters

KH Proposal Support Data

Meter Changeout when Meter Agent Changes - Interval Usage (used to tell the receiver that this is a partial usage statement. The billing agent must combine the KH usage and the MV usage to determine total usage

for period.

Conditional BPT07 306 Action Code

O ID 1/2

Code indicating type of action

F Final

Code to indicate this is the final usage data being sent for this customer. Either the customer account is final with the LDC or the customer switched to a new ESP. **NJ PSE&G:** PSE&G only sends "F" on a customer account final. They do not send an "F" on a customer

switch.

Conditional BPT09 127 Reference Identification

O AN 1/30

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

When BPT01 = 01 (cancel), this element is required and should contain the transaction identification number from BPT02 of the transaction that is being cancelled.

Segment: **DTM** Date/Time Reference (649=Document Due Date)

Position: 050

Loop:

Level: Heading Usage: Optional Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Comments	
Notes:	Required for Bill Ready Consolidated Billing where the meter reading party sends an 867 to the non-billing party, who calculates their own portion of the bill and sends the 810 to the billing party. Must be expressed in Eastern Prevailing Time. Not provided on cancel transaction.
PA Use:	Required for Bill Ready, not used in Rate Ready and Dual Billing Note: For ESP Consolidated Billing, the document due date will be set according to the specific LDC bill ready implementation.
NJ Use:	Required for Bill Ready, not used in Rate Ready and Dual Billing
DE Use:	Required for Bill Ready, not used in Rate Ready and Dual Billing
MD Use:	Required for Bill Ready, not used in Rate Ready and Dual Billing
Examples:	DTM*649*19990131*2359

	Ref.	Data	2 2	Caro Summary		
Must Use	<u>Des.</u> DTM01	Element 374	Name Date/Time Qualific Code specifying type of	er date or time, or both date and time	Att M	ributes ID 3/3
			649	Document Due		
				The date that the non-billing party mustransaction back to the billing party.	st pro	vide the 810
				If a file is received by the billing party and the billing party cannot process it, the non-billing party (via email, phone means).	they	must notify
Must Use	DTM02	373	Date Date expressed as CCYY	YMMDD	X	DT 8/8
Must Use	DTM03	337	HHMMSSDD, where H	our clock time as follows: HHMM, or HHMMSS, of the hours (00-23), M = minutes (00-59), S = integer decimal seconds are expressed as follows: D = tent	secon	ds (00-59) and
			HHMM format			

MEA Measurements (NP=Percent Participation) **Segment:**

Position: 075

Loop:

Dof

Data

Level: Heading Usage: **Optional** Max Use:

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

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

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

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

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: 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.

Required if less than 100% PA Use: NJ Use: Not used Exception - RECO: For RECO only – allow this field to have value other than 100%. When this is less than 100%, RECO will apply this percentage to the customers usage when calculating a rate ready bill. DE Use: Not used MD Use: Only used by Potomac Edison **Example:** MEA**NP*.66667

Data Element Summary

Must Use	Des. MEA02	Element 738	Name Measurement Qual Code identifying a specifi	ifier c product or process characteristic to which a me	0	ributes ID 1/3 nent applies
			NP	Percent Participation		
				This code is used to indicate the percelload that is supplied by the ESP. This multiplication of two fields that are on transaction, AMT*7N (Participating In AMT*QY (Eligible Load).	is the	e 314
Must Use	MEA03	739	Measurement Valu		X	R 1/20

The value of the measurement

The whole number "1" represents 100 percent. Decimal numbers less than "1" represent percentages from 1 percent to 99 percent.

Segment: N1 Name (8S=LDC Name)

Position: 080
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1

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

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

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

Semantic Notes:

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

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

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

Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier Code Code identifying an organizational entity, a physical location, proper 8S Consumer Service Provider (CSP	M rty or an indi	ributes ID 2/3 vidual
Must Use	N102	93	LDC 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 Ident D-U-N-S Number, Dun & Bradst D-U-N-S+4, D-U-N-S Number w	reet	, ,
Must Use	N104	67	Suffix 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:

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

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

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

Semantic Notes:

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

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

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

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	N1*SJ*ESP COMPANY*9*007909422ESP

Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	Name Entity Identifier C Code identifying an orga SJ	ode nizational entity, a physical location, property or Service Provider	M	ributes ID 2/3 vidual
				ESP		
Must Use	N102	93	Name Free-form name ESP Company Nam	e	X	AN 1/60
Must Use	N103	66	Identification Code Code designating the sys	e Qualifier tem/method of code structure used for Identificat D-U-N-S Number, Dun & Bradstreet	X ion Co	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 Code Code identifying a party ESP D-U-N-S Num	e	X	AN 2/20

 $\begin{tabular}{ll} Segment: & $N1$ Name (G7=Renewable Energy Provider Name) \\ \end{tabular}$

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.

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

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

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

Semantic Notes:

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

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

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

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

Notes:	Please note that while you may place your N1 segments in any order, the REF segments
	that follow must be contained within the N1*8R loop.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	N1*8R*CUSTOMER NAME

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	N101	98	Entity Identifier C	Code	\mathbf{M}	ID 2/3
			Code identifying an orga	anizational entity, a physical location, property or a	an indi	vidual
			8R	Consumer Service Provider (CSP) Cus	stome	r
				End Use Customer		
Must Use	N102	93	Name Free-form name		X	AN 1/60
			Customer Name			

 $\textbf{Segment:} \quad \textbf{REF} \ \textbf{Reference Identification} \ (\textbf{11=ESP Account Number})$

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:	Required if it was previously provided to the LDC.
NJ Use:	Conditional
	In New Jersey, Atlantic City Electric, JCP&L and PSE&G will store ESP account number and will be required to send it if it was previous provided to the LDC. Rockland Electric will not be storing ESP account number, and will never send it on an 867 transaction. Atlantic City Electric will only be storing 20 characters.
DE Use:	Delmarva will store ESP account number and will be required to send it if it was previous provided to the LDC. Delmarva will only be storing 20 characters.
MD Use:	Same as PA Note: Delmarva will store ESP account number, but will only store 20 characters.
Example:	REF*11*1394959

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		Identification Qualifier g the Reference Identification	Att:	ributes ID 2/3
			11	Account Number		
				ESP-assigned account number for the	e end u	se customer.
Must Use	REF02	127		Identification rmation as defined for a particular Transaction Set or as sp Dualifier	X pecified t	AN 1/30 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
NJ Use:	Required
	Note: RECO only uses REF03 value of "U" for unmetered usage. Separate enrollment
	requests must be made for metered/unmetered usage for RECO. No other EDC uses
	REF03.
DE Use:	Required
MD Use:	Required
Example:	REF*12*1239485790

Data Element Summary									
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			
			12	Billing Account					
				LDC-assigned account number for the customer. Must appear as it does on the					
Must Use	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specification Qualifier		X ecified	AN 1/30 by the Reference			
Optional	REF03	352	Description A free-form description U	on to clarify the related data elements and their cont Unmetered	X	AN 1/80			

Segment: REF Reference Identification (45=LDC Old Account Number)

Position: 120
Loop: N1
Level: Heading
Usage: Optional
Max Use: 12

Purpose: To specify identifying information

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

4 If either C04003 or C04004 is present, then the other is required.
5 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:

Note: Only used when LDC is sending this transaction.				
Required if account number has changed within the last 60 days.				
Required if account number has changed within the last 60 days.				
Not used				
Note: Only used when LDC is sending this transaction.				
Not Used by BGE, PEPCO, or Delmarva.				
PE: Required if the account number has changed in the last 60 days.				
REF*45*939581900				

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification			ributes ID 2/3
			45	Old Account Number		
				Previous LDC-assigned account numb customer.	er for	the end use
Must Use	REF02	127	Reference Identific Reference information as Identification Qualifier	cation s defined for a particular Transaction Set or as spec	X cified b	AN 1/30 by the Reference

Segment: **REF** Reference Identification (BLT=Billing Type)

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

Note: Some utilities may not be able to comply with this until later since this was added

so close to the 4010 implementation date.

NJ Use: Optional
DE Use: Optional
MD Use: Optional

Example: REF*BLT*LDC

Data Element Summary

Ref. Data **Element Name** Des. X12 Attributes ID 2/3**Must Use** REF01 128 **Reference Identification Qualifier** Code qualifying the Reference Identification **BLT** Billing Type Identifies whether the bill is consolidated by the LDC or ESP, or whether each party will render their own bill. See REF02 for valid values. Must Use REF02 127 **Reference Identification** X AN 1/30

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

When REF01 is BLT, valid values for REF02 are:

LDC - The LDC bills the customer ESP - The ESP bills the customer

DUAL - Each party bills the customer for their portion

Note: In New Jersey, only LDC and DUAL are valid.

Segment: **REF** Reference Identification (PC=Bill Calculator)

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

Note: Some utilities may not be able to comply with this until later since this was added

so close to the 4010 implementation date.

NJ Use: Optional
DE Use: Optional
MD Use: Optional
Example: REF*PC*LDC

Data Element Summary

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	Name Reference Identific Code qualifying the Refe	-		Attributes ID 2/3
			PC	Production Code		
				Identifies the party that is to calculate bill.	the char	rges on the
Must Use	REF02	127	Reference Identifie	cation	\mathbf{X}	AN 1/30

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

When REF01 is PC, valid values for REF02 are:

LDC - The LDC calculates the charges on the bill (Rate Ready)

DUAL - Each party calculates its portion of the bill (Dual or Bill Ready)

IF		THEN			
Bills the	Calci	ulates	Billing Party	Calc. Party	
Customer	LDC Portion	ESP Portion	REF*BLT	REF*PC	
LDC	LDC	LDC	LDC	LDC	
LDC	LDC	ESP	LDC	DUAL	
ESP	LDC	ESP	ESP	DUAL	
DUAL	LDC	ESP	DUAL	DUAL	

Be careful to use the UIG Standard Code Values LDC and ESP rather than the Pennsylvania versions of those codes.

Segment: PTD Product Transfer and Resale Detail (BB=Monthly Billed Summary)

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

Max Use: 1

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

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

Semantic Notes:

Comments:

Notes:	PTD Loops may be sent in any order.
PA Use:	One Monthly Billed Summary PTD loop is required for every account.
NJ Use:	One Monthly Billed Summary PTD loop is required for every account.
DE Use:	One Monthly Billed Summary PTD loop is required for every account.
MD Use:	One Monthly Billed Summary PTD loop is required for every account.
Example:	PTD*BB

Data Element Summary

Must Use	Ref. <u>Des.</u> PTD01	Data Element 521	Name Product Transfer Code identifying the type		Attrib M I	outes D 2/2
			BB	Demand Information Only		
				This information is obtained from the breflect the billing data for this account	<u> </u>	

measure level.

Note:

Refer to the "PTD Loops Definition and Use" section earlier in this document for an explanation of this specific PTD Loop. $Segment: \quad DTM \ \, \text{Date/Time Reference (150=Service Period Start)}$

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

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*19990101

	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 Date expressed as	CCYYMMDD	X	DT 8/8

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	DTM*151*19990131

	Ref.	Data				
	Des.	Element	<u>Name</u>		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		
			151	Service Period End		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as	CCYYMMDD		

 $\textbf{Segment:} \quad \boldsymbol{QTY} \; \, \textbf{Quantity} \; (\textbf{Billed kwh})$

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

Max Use:

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:	Billed KWH
PA Use:	Required
NJ Use:	Required
	Note: For a net metered account, this will reflect the net usage.
DE Use:	Required
MD Use:	Required
Example:	QTY*D1*22348*KH

Data Element Summary

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	Name Quantity Qualifier Code specifying the type		Attı M	ributes ID 2/2
			D1	Billed		
				Used when Quantity in QTY02 is a "H	Billed'	' quantity.
Must Use	QTY02	380	Quantity Numeric value of quantity	y	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M	leasurement Code	M	ID 2/2

Code specifying the units in which a value is being expressed, or manner in which a measurement

has been taken

KH Kilowatt Hour

Billed Kilowatt Hours as shown on the customer's bill. May or may not be the same as measured kilowatt

hours.

 $\textbf{Segment:} \quad QTY \; \textbf{Quantity} \; \textbf{(Billed Demand)}$

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:

Committee	
Notes:	Billed Demand
PA Use:	Required if account measures Demand (KW). This must be sent even if Billed (derived) demand is equal to measured demand.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	QTY*D1*14*K1

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	Name Quantity Qualifier Code specifying the type		Attı M	ributes ID 2/2
			D1	Billed		
				Used when Quantity in QTY02 is a "B	illed'	'quantity.
Must Use	QTY02	380	Quantity Numeric value of quantity	y	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	Ieasurement Code sin which a value is being expressed, or manner in	M n which	ID 2/2 a measurement
			K1	Kilowatt Demand		

 $\textbf{Segment:} \quad QTY \,\, \textbf{Quantity} \, (\textbf{Measured Demand})$

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:	Measured Demand
PA Use:	Required if account measures Demand (KW)
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	QTY*QD*14*K1

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	<u>Name</u> Quantity Qualifier	Attributes 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	teasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			K1	Kilowatt Demand

Segment: PTD Product Transfer and Resale Detail (BO=Meter Services 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:

Notes:	Metered Services Summary. This loop is always used in conjunction with the Metered Services Detail loop (PTD01=PM). It is used when the metering agent is reporting interval data at the meter level. Note: All "Use" fields for this PTD loop are relevant only if this PTD loop (PTD01=BO) is used.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	PTD*BO

Must Use	Ref. <u>Des.</u> PTD01	Data <u>Element</u> 521	Name Product Transfer Code identifying the typ	• •	Attributes M ID 2/2
			ВО	Designated Items	
				Meter Services Summary	

 $Segment: \quad DTM \ \, \text{Date/Time Reference (150=Service Period Start)}$

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the beginning of the date range for this meter for this billing period.						
	Note: The Service Period Start Date and Service Period End Date in the Metered						
	Services Summary loop <u>must</u> match the dates in the Metered Services Detail loop.						
PA Use:	Required, unless a "DTM*514" is substituted for this code.						
NJ Use:	Not Used						
DE Use:	Not Used						
MD Use:	Not Used						
Example:	DTM*150*19990101						

	Ref.	Data				
	Des.	<u>Element</u>	<u>Name</u>		<u>Att</u>	<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		

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the end of the date range for this meter for this billing period.					
	Note: The Service Period Start Date and Service Period End Date in the Metered					
	Services Summary loop <u>must</u> match the dates in the Metered Services Detail loop.					
PA Use:	Required, unless a "DTM*514" is substituted for this code.					
NJ Use:	Not Used					
DE Use:	Not Used					
MD Use:	Not Used					
Example:	DTM*151*19990131					

	Ref.	Data				
	Des.	Element	<u>Name</u>		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		
			151	Service Period End		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as	CCYYMMDD		

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

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

,	
Notes:	Used in conjunction with either the Service Period Start Date or the Service Period End
	Date to indicate when a meter has been replaced. Separate PTD loops must be created
	for each period and meter.
PA Use:	Required when a meter is changed and the meter agent does not change.
NJ Use:	Not Used
DE Use:	Not Used
MD Use:	Not Used
Example:	Date Range in the first PTD is shown as:
	DTM*150*19990201
	DTM*514*19990214
	Date Range in the second PTD is shown as:
	DTM*514*19990214
	DTM*151*19990228

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualifier Code specifying type of date or time, or both date and time			ributes ID 3/3
			514	Transferred		
				Exchanged meter read date		
Must Use	DTM02	373	Date Date expressed as CCYY	MMDD	X	DT 8/8

 $REF \ \ Reference \ Identification \ (MG=Meter \ Number)$ **Segment:**

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

Purpose: To specify identifying information

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

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

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

Comments:

,	
PA Use:	Required if this is a metered account and the meter is on the account at the end of the period. For some utilities, they may not be able to provide the actual meter number for a meter that has been changed out during the month. In that case, the REF*MG will not be sent. Everyone is working toward being able to provide the old meter number.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*MG*2222277S

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

Segment: ${f REF}$ Reference Identification (JH=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:

Notes:	Meter Role – effect of consumption on summarized total:
PA Use:	Required if consumption is provided at a meter level
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*JH*A

Data Element Summary

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	REF01	128	Reference Ide	entification Qualifier	\mathbf{M}	ID 2/3
			Code qualifying t	he Reference Identification		
			JH	Meter Role		
Must Use	REF02	127	Reference Ide	entification	X	AN 1/30
			Reference inform	ation as defined for a particular Transaction S	Set or as specified I	ny the Reference

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

When REF01 is JH, valid values for REF02 are:

- $S = Subtractive\mbox{ this consumption needs to be subtracted from the summarized total.}$
- A = Additive this consumption contributed to the summarized total (do nothing).
- I = Ignore this consumption did not contribute to the summarized total (do nothing).

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 meters with dials
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*IX*6.0 REF*IX*5.1 REF*IX*4.2

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		ification Qualifier Reference Identification	<u>X12</u> M	2 Attributes ID 2/3
			IX	Rate Card Number		
				Number of Dials on the Meter display of dials to the left of the decimal, a det the number of dials to the right of the	cimal	point, and
Must Use	REF02	127	Reference Ident	ification	X	AN 1/30
			Reference information Identification Qualifi	on as defined for a particular Transaction Set or as spe er	cified l	by the Reference
Optional	REF03	352	Description A free-form descripti	on to clarify the related data elements and their conte	X	AN 1/80
			Optional use: See	e Meter Type (REF*MT) on 814 Enrollme	nt for	valid codes.

# Dials	Positions to	Positions to	X12 Example
	left of decimal	right of decimal	
6	6	0	REF*IX*6.0
6	5	1	REF*IX*5.1
6	4	2	REF*IX*4.2

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:	There will be one QTY loop for each of the QTY03 Units of Measurement listed below					
	that are measured on this account when interval data is being provided at the meter level.					
PA Use:	Required					
NJ Use:	Required					
DE Use:	Required					
MD Use:	Required					
Example:	QTY*QD*22348*KH					

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	$\overline{\text{QTY01}}$	673	Quantity Qualifier	$\overline{\text{M}}$ ID $2/2$
			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
			K3	Kilovolt Amperes Reactive Hour (kVARH)
				Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
			KH	Kilowatt Hour (kWh)

Segment: MEA Measurements (MU=Meter Multiplier)

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.

PA Use:	Required for a meter that has a meter multiplier other than 1.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	MEA**MU*2

Data Element Summary

	Ref.	Data			
	Des.	Element	Name	Att	<u>tributes</u>
Must Use	$\overline{\text{MEA}02}$	738	Measurement Qualifier	O	ID 1/3
			Code identifying a specific product or process characteristic to which a	measurer	ment applies
			MU Multiplier		
Must Use	MEA03	739	Measurement Value	\mathbf{X}	R 1/20
			The value of the measurement		

Represents the meter constant when MEA02 equals "MU". When the

multiplier equals 1, do not send this MEA segment.

Segment: MEA Measurements (ZA=Power Factor)

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.

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

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

3 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.

	negative (-) value and with Aoo as the positive (+) value.
PA Use:	Power Factor: Relationship between watts and volt amperes necessary to supply electric
	load. Required if it is available to the meter agent and it is used in the calculation of the
	customer's bill. This is only relevant and should only be sent with Demand (K1). If not
	present with a demand quantity, it should be assumed to be 1.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	MEA**ZA*.95

Data Element Summary

Must Use	Ref. <u>Des.</u> MEA02	Data <u>Element</u> 738	Name Measurement Qua Code identifying a specif	llifier fic product or process characteristic to which a me	O	ributes ID 1/3 nent applies
			ZA	Power Factor		
				Relationship between watts and volt – necessary to supply electric load	ampe	eres
Must Use	MEA03	739	Measurement Value The value of the measure		X	R 1/20
			Danuaranta tha Danu	To at an anthon MEAO2 accords "7A" W	71	D

Represents the Power Factor when MEA02 equals "ZA". When no Power Factor is present or the value is 1, do not send this MEA segment.

Segment: MEA Measurements (CO=Transformer Loss Factor)

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.

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

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

3 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.

	negative () value and iviez too as the positive () value.					
PA Use:	PA Use: Transformer Loss Factor: Required when customer owns a transformer and the					
	transformer loss is not calculated by the meter.					
NJ Use:	Same as PA					
DE Use:	Same as PA					
MD Use:	Same as PA					
Example:	MEA**CO*1.02					

Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Name Measurement Qualifier Code identifying a specific pro	Attributes O ID 1/3 duct or process characteristic to which a measurement applies	
			Wh	nsformer Loss Multiplier en a customer owns a transformer and the asformer loss is not measured by the meter.	
Must Use	MEA03	739	Measurement Value The value of the measurement	X R 1/20	
			Represents the Transform	mer Loss Multiplier when MEA02 equals "CO".	

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

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

Semantic Notes:

Comments:

Comments.	
Notes:	Meter Services Detail
	This loop is always used in conjunction with the Metered Services Summary loop (PTD01=BO). It is used when the metering agent is reporting interval data at the meter level.
	Note: This loop is optional on a cancel transaction.
	Note: All "Use" fields for this PTD loop are relevant only if this PTD loop (PTD01=PM)
	is used.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	PTD*PM
R	

Data Element Summary

	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>		Attributes
Must Use	PTD01	521	Product Transf	fer Type Code	\overline{M} ID $2/2$
			Code identifying the	type of product transfer	
			PM	Physical Meter Information	
				Meter Services Detail	

Note:

Refer to the "PTD Loops Definition and Use" section earlier in this document for an explanation of this specific PTD Loop.

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

3 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the beginning of the date range for this meter for this billing period.
1	Note: The Service Period Start Date and Service Period End Date in the Meter Services
	Summary loop <u>must</u> match the dates in the Meter Services Detail loop.
PA Use:	Required, unless a "DTM*514" is substituted for this code.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	DTM*150*19990101

	Ref.	Data				
	Des.	<u>Element</u>	<u>Name</u>		<u>Att</u>	<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		

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

3 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the end of the date range for this meter for this billing period.
	Note: The Service Period Start Date and Service Period End Date in the Meter Services
	Summary loop <u>must</u> match the dates in the Meter Services Detail loop.
PA Use:	Required, unless a "DTM*514" is substituted for this code.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	DTM*151*19990131

	Ref.	Data					
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>	
Must Use	$\overline{DTM01}$	374	Date/Time Qu	ualifier	$\overline{\mathbf{M}}$	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: DTM Date/Time Reference (514=Meter Exchange Date)

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.
PA Use:	Required when a meter is changed and the meter agent does not change.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	Date Range in the first PTD is shown as: DTM*150*19990201 DTM*514*19990214
	Date Range in the second PTD is shown as: DTM*514*19990214 DTM*151*19990228

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualifie Code specifying type of	e r date or time, or both date and time	Att M	ributes ID 3/3
			514	Transferred		
				Exchanged meter read date		
Must Use	DTM02	373	Date Date expressed as CCYY	MMDD	X	DT 8/8

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.

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

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

Comments:

PA Use:	Required if this is a metered account and the meter is on the account at the end of the period. For some utilities, they may not be able to provide the actual meter number for a meter that has been changed out during the month. In that case, the REF*MG will not be sent. Everyone is working toward being able to provide the old meter number.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*MG*2222277S

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		entification Qualifier ne Reference Identification	Attı M	ributes ID 2/3
			MG	Meter Number		
	REF02	127	Reference Ide	entification	X	AN 1/30
			Reference information Qua	ation as defined for a particular Transaction Set or as sp lifier	ecified by	y 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.

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

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

Comments:

Notes:	The use of this segment allows the receiver to know the interval length being sent.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	REF*MT*KH015

Data Element Summary

Must Use	Des. REF01	Element 128		entification Qualifier the Reference Identification	Att M	ributes ID 2/3
			MT	Meter Type		
Must Use	REF02	REF02 127	Reference Identification X AN 1/30 Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
				is MT, the meter type is expressed s are the type of consumption, the l		

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. Since this value ties to the consumption being reported, the value "COMBO" is not valid. Valid values can be a combination of the following values:

	Type of Consumption	I	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

For Example:

KHMON Kilowatt Hours Per Month

K1015 Kilowatt Demand per 15 minute interval

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.

3 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

PA Use:	Required	
NJ Use:	Required	ا
 DE Use:	Required	
MD Use:	Required	
Example:	QTY*QD*87*KH	

Must Use Name Attributes Attributes		D.C	D 4	Data Eleme	ant Summary
Must Use QTY01 673 Quantity Qualifier 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. 20 Unavailable Used when meter data is not available to fill the intervals. 87 Actual Quantity Received (Net Metering) Used when the net generation quantity received is actual. 96 Non-Billable Quantity Indicates this quantity and interval are outside of the actual bill period 9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated. Must Use QTY02 380 Quantity Summeric value of quantity Must Use QTY03 355 Unit or Basis for Measurement Code M ID 2/2 Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand (kW) 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				Nome	A 44milloutes
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QD Actual Quantity Delivered Used when the quantity delivered is an actual quantity.					* *
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20				QD	= -
Used when meter data is not available to fill the intervals. 87				20	• •
intervals. Actual Quantity Received (Net Metering) Used when the net generation quantity received is actual. 96 Non-Billable Quantity Indicates this quantity and interval are outside of the actual bill period 9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated. Must Use QTY02 380 Quantity Numeric value of quantity Must Use QTY03 355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand (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				20	
Used when the net generation quantity received is actual. 96 Non-Billable Quantity Indicates this quantity and interval are outside of the actual bill period 9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated. Must Use QTY02 380 Quantity Numeric value of quantity Must Use QTY03 355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand (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					intervals.
actual. Non-Billable Quantity Indicates this quantity and interval are outside of the actual bill period 9H Estimated Quantity Received (Net Metering) Used when the net generation quantity received is estimated. Must Use QTY02 380 Quantity Numeric value of quantity Must Use QTY03 355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand (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				87	
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Must Use QTY02 380 Quantity Numeric value of quantity Must Use QTY03 355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand (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					Used when the net generation quantity received is
Must Use QTY03 355 Unit or Basis for Measurement Code M ID 2/2 Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand (kW) 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					estimated.
Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken 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	Must Use	QTY02	380		
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	Must Use	QTY03	355	Code specifying the units	
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				K 1	Kilowatt Demand (kW)
Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage					• • •
customer's equipment; billable when kilowatt demand usage				K2	Kilovolt Amperes Reactive Demand (kVAR)
K3 Kilovolt Amperes Reactive Hour (kVARH)				K3	
Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters					Represents actual electricity equivalent to kilowatt hours;
K4 Kilovolt Amperes (KVA)				K4	

KH Kilowatt Hour (kWh)

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

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

3 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Dof

Data

Notes:	End date and time of the period for which the quantity is provided. Time will include
	zone. Each interval must be explicitly labeled with the date and time.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	DTM*582*19990115*1500*ET

Data Element Summary

Must Use	Code specifi		Date/Time Quality Code specifying type of	me Qualifier M ID flying type of date or time, or both date and time		tributes ID 3/3
			582	Report Period		
				The date/time of the end of the interval	ıl.	
Must Use	DTM02	373	Date Date expressed as CCY	YYMMDD	X	DT 8/8
Must Use	DTM03	337	HHMMSSDD, where	hour clock time as follows: HHMM, or HHMMSS, H = hours (00-23), M = minutes (00-59), S = integes; decimal seconds are expressed as follows: D = ten	r secon	ds (00-59) and
			HHMM format			
Must Use	DTM04	623	Time Code		0	ID 2/2

Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. If meter is not adjusted for daylight savings time, the time code will always reflect Eastern Daylight Time which will be interpreted as prevailing time.

ED Eastern Daylight Time
ES Eastern Standard Time

Segment: PTD Product Transfer and Resale Detail (BR=Non-Interval Metered Services

Summary)

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

Max Use: 1

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

provide identifying data

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

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

Semantic Notes:

Comments:

Notes:	PTD Loops may be sent in any order.
PA Use:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used. Non-interval data will be summed in this loop.
DE Use:	Not Used
MD Use:	Not Used
Example:	PTD*BR

Data Element Summary

	Kei.	Data			
	Des.	Element	<u>Name</u>	<u>Att</u> :	<u>ributes</u>
Must Use	PTD01	521	Product Transfer Type Code Code identifying the type of product transfer	M	ID 2/2
			Code identifying the type of product transfer		

BR Other

A summary loop will be provided for each type of consumption for every unit of measure for all non-interval meters in the account.

Note:

Refer to the "PTD Loops Definition" section earlier in this document for an explanation of this specific PTD Loop.

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

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

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:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used.
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*150*19990101

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	$\overline{DTM01}$	374	Date/Time Qu	aalifier	$\overline{\mathbf{M}}$	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		

Segment: **DTM** Date/Time Reference (151=Service Period End)

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

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:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used.
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*151*19990131

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	$\overline{DTM01}$	374	Date/Time Qu	aalifier	$\overline{\mathbf{M}}$	$\overline{1D} 3/3$
			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: 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:	There will be one QTY loop for each of the QTY03 Units of Measurement listed below
	that are measured on this account.
PA Use:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
Example:	QTY*QD*22348*KH

	Ref. Des.	Data Element	Name		A 111	ributes
Must Use	QTY01	673	Quantity Qualifier Code specifying the type	of quantity	M	ID 2/2
			KA	Estimated Quantity Delivered Used when the quantity delivered is an quantity.	estin	nated
			QD	Actual Quantity Delivered Used when the quantity delivered is an	actu	al quantity.
Must Use	QTY02	380	Quantity Numeric value of quantity	y	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	leasurement Code in which a value is being expressed, or manner in	M n which	ID 2/2 a measurement
			K3	Kilovolt Amperes Reactive Hour (kVA	ARH)	
				Represents actual electricity equivalent hours; billable when usage meets or ex parameters		
			KH	Kilowatt Hour		

Segment: PTD Product Transfer and Resale Detail (PL=Non-Interval Metered Services

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:	PTD Loops may be sent in any order.
	There will be a separate PTD loop for each unit of measurement for each non-interval meter on the account.
PA Use:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used.
DE Use:	Not Used
MD Use:	Not Used
Example:	PTD*PM

Data Element Summary

	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Att</u>	<u>ributes</u>
Must Use	PTD01	521	Product Transfer Type Code	$\overline{\mathbf{M}}$	ID 2/2
			Code identifying the type of product transfer		

PL Physical Non-Interval Meter Information

Note:

Refer to the "PTD Loops Definition" section earlier in this document for an explanation of this specific PTD Loop.

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

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the beginning of the date range for this meter for this billing period.					
	This specific PTD loop is required if there are metered services on the account.					
PA Use:	Not Used					
NJ Use:	Required unless a "DTM*514" is substituted for this code, if this is a transaction containing interval and non-interval data; otherwise, not used.					
DE Use:	Not Used					
MD Use:	Not Used					
Example:	DTM*150*19990101					

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

Segment: **DTM** Date/Time Reference (151=Service Period End)

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the end of the date range for this meter for this billing period.
	This specific PTD loop is required if there are metered services on the account.
PA Use:	Not Used
NJ Use:	Required unless a "DTM*514" is substituted for this code, if this is a transaction containing interval and non-interval data; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
Example:	DTM*151*19990131

Must Use	Ref. Des.	Data Element	Name			ributes
Must Use	DTM01	374	Date/Time Qu		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: DTM Date/Time Reference (514=Meter Exchange Date)

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a non-interval meter has been replaced. Separate PTD loops must be created for each period and non-interval meter.
PA Use:	Not Used
NJ Use:	Required when a meter is changed, if this is a transaction containing interval and non- interval data; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
Example:	Date Range in the first PTD is shown as: DTM*150*19990201 DTM*514*19990214 Date Range in the second PTD is shown as:
	DTM*514*19990214 DTM*151*19990228

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
			514	Transferred		
				Exchanged meter read date		
Must Use	DTM02	373	Date Date expressed as CCYY	YMMDD	X	DT 8/8

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.

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

Comments:

Semantic Notes:

PA Use:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used.
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*MG*2222277S

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
			MG	Meter Number		
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

Segment: ${\bf REF}$ 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.

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

Comments:

Semantic Notes:

PA Use:	Not Used
NJ Use:	Optional if this is a transaction containing interval and non-interval data; otherwise, 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 Id Reference inform Identification Qu	nation as defined for a particular Transaction S	X Set or as specified l	AN 1/30 by the Reference

 $\textbf{Segment:} \quad \textbf{REF} \ \ \textbf{Reference Identification} \ (\textbf{PR=LDC Rate Subclass})$

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.

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

Semantic Notes: Comments:

Notes:	This iteration of the REF segment is used for meter level information.					
PA Use:	Not Used					
NJ Use:	Optional if this is a transaction containing interval and non-interval data; otherwise, not used.					
DE Use:	Not Used					
MD Use:	Not Used					
Example:	REF*PR*123					

Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		ntification Qualifier e Reference Identification	<u>X12</u> M	2 Attributes ID 2/3
			PR	Price Quote Number		
				LDC Rate Subclass – Used to provide classification of a rate.	e furth	er
Must Use	REF02	127	Reference Ider Reference informat Identification Quali	ion as defined for a particular Transaction Set or as sp	X pecified l	AN 1/30 by the Reference

Segment: ${\bf REF}$ Reference Identification (JH=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:

Committee	
PA Use:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not used. Note: In New Jersey, Co-gen accounts will be handled on a case by case basis, and the usage for them may not be sent via EDI.
DE Use:	Not Used
MD Use:	Not Used
Example:	REF*JH*A

Data Element Summary

Must Use	Des. REF01	Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification		Attr M	ributes ID 2/3
			JH	Meter Role		
Must Use	REF02	127	Reference Information	lentification nation as defined for a particular Transaction	X n Set or as specified l	AN 1/30 by the Reference

Identification Qualifier

When REF01 is JH, valid values for REF02 are:

- $S = Subtractive\mbox{ this consumption needs to be subtracted from the summarized total.}$
- $\label{eq:Additive-distance} A = Additive \text{ this consumption contributed to the summarized total} \\ \text{ (do nothing)}.$
- I = Ignore this consumption did not contribute to the summarized total (do nothing).

 $\textbf{Segment:} \quad \textbf{REF} \ \ \textbf{Reference Identification} \ (\textbf{IX=Number of Dials/Digits})$

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:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used.
DE Use:	Not Used
MD Use:	Not Used
Examples:	REF*IX*6.0
_	REF*IX*5.1
	REF*IX*4.2

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		tification Qualifier Reference Identification	<u>X12</u> M	2 Attributes ID 2/3
			IX	Rate Card Number		
				Number of Dials on the Meter displayed of dials to the left of the decimal, a deciment the number of dials to the right of the	cimal	point, and
Must Use	REF02	127	Reference Identi Reference information Identification Qualifi	tification on as defined for a particular Transaction Set or as spe	X	AN 1/30
Optional	REF03	352		ion to clarify the related data elements and their conte e Meter Type (REF*MT) on 814 Enrollme		AN 1/80

# Dials	Positions to	Positions to	X12 Example
	left of decimal	right of decimal	
6	6	0	REF*IX*6.0
6	5	1	REF*IX*5.1
6	4	2	REF*IX*4.2

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:

Comments.	
Notes:	There will be one QTY loop for each of the QTY03 Units of Measurement listed below for each meter that is measured on this account.
	If there are 2 meters on the account, and one measures KWH and KW, and the other measures just KWH, there will be 3 PTD01=PM loops.
	If a meter measures total usage, as well as on-peak and off-peak, there will be three QTY loops sent within one PTD01=PM loop. The MEA segment that follows each QTY will specify which time of use the QTY applies to.
PA Use:	Not Used
NJ Use:	Required if this is a transaction containing interval and non-interval data; otherwise, not
	used.
DE Use:	Not Used
MD Use:	Not Used
Example:	QTY*QD*22348*KH
	QTY*QD*14*K1 (If meter measures both, you will have two QTY loops)

			Data Elem	ent Summar y		
	Ref. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>	<u>A</u>	ttribute	<u>es</u>
Must Use	QTY01	673	Quantity Qualifier	N	1 ID 2	2/2
			Code specifying the type	of quantity		
			KA	Estimated		
				Used when Quantity in QTY02 is Estima	ted	
			QD	Quantity Delivered		
				Used when Quantity in QTY02 is Actual		
Must Use	QTY02	380	Quantity Numeric value of quantit	X	K R 1	l /15
Must Use	QTY03	355	Unit or Basis for M. Code specifying the units has been taken	Ieasurement Code Sin which a value is being expressed, or manner in whether the state of the s		
			K1	Kilowatt Demand (kW)		
			K2	Represents potential power load measured predetermined intervals Kilovolt Amperes Reactive Demand (kVA)		
			112	Reactive power that must be supplied for of customer's equipment; billable when k usage meets or exceeds a defined parame	specific	
			K3	Kilovolt Amperes Reactive Hour (kVAR)		
				Represents actual electricity equivalent to hours; billable when usage meets or exceparameters		
			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.

	negative () value and with 100 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:	Required if this is a transaction containing interval and non-interval data; otherwise, not						
	used. Optional on a cancel						
DE Use:	Not Used						
MD Use:	Not Used						
Examples:	MEA*AA*PRQ*22348*KH***51						
•	MEA*AA*PRQ*14*K1***51 (If meter measures multiple things, you need to send						
	multiple QTY loops, one for each unit of measurement).						

Data Element Summary						
	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	ributes
Must Use	MEA01	737	Measurement Ro	eference ID Code	0	ID 2/2
			Code identifying the b	proad category to which a measurement applies		
			AA	Meter reading-beginning actual/endir	ig acti	ıal
			AE	Meter reading-beginning actual/endir	ig esti	mated
			AF	Actual Total		
			ВО	Meter Reading as Billed		
				Used when billing charges are based agreements or pre-established usage a usage		
			EA	Meter reading-beginning estimated/en	nding	actual
			EE	Meter reading-beginning estimated/en	nding	estimated
Must Use	MEA02	738	Measurement Que Code identifying a spe	ualifier ecific product or process characteristic to which a m	O neasurer	ID 1/3 ment applies
			PRQ	Consumption		
Must Use	MEA03	739	Measurement Va The value of the meas		X	R 1/20
			difference in the r	ty of consumption delivered for service preter readings (or as measured by the meacluding 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		
			K2	Represents potential power load measured predetermined intervals Kilovolt Amperes Reactive Demand	ured a	ıt
			K3	Reactive power that must be supplied of customer's equipment; billable whe usage meets or exceeds a defined para Kilovolt Amperes Reactive Hour	n kilo	watt demand
				Represents actual electricity equivalent hours; billable when usage meets or ex parameters		
			K4	Kilovolt Amperes (KVA)		
			K5	Kilovolt Amperes Reactive		
			KH	Kilowatt Hour		
Conditional	MEA05	740	Range Minimum The value specifying the	e minimum of the measurement range	X	R 1/20
			Beginning reading			
	MEAOC		and ending reads for and ending reads at reads, you only pro Condition for MD Condition for NJ:	Required for residential if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for residential in the Required for residential if printed on the Required for residential if printed on the Required for residential if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes if printed on the Required for all rate classes in the Required for all rate classes in the Required for all rate classes in the Required for the Required for all rate classes in the	providerovidence LD	de beginning e beg/ending oC bill. LDC bill, and
Must Use	MEA06	741	Range Maximum The value specifying the	e maximum of the measurement range	X	R 1/20
				single reading (e.g., demand).		
			for on and off peak and consumption. provide consumption MD: Required for	residential if printed on the LDC bill.	g and e	ending reads s, you only
Must Use	MEA07	935	Measurement Sign		O	ID 2/2
				nmark, qualify or further define a measur	emen	it value
			41 42	Off Peak On Peak		
			43	Intermediate		
			51	Total		
				Totalizer		
			66	Shoulder		

Segment: MEA Measurements (MU=Meter Multiplier)

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.

PA Use:	Not Used
NJ Use:	Required for non-interval meters that have a meter multiplier other than 1 if this is a
	transaction containing interval and non-interval data; otherwise, not used.
DE Use:	Not Used
MD Use:	Not Used
Example:	MEA**MU*2

Data Element Summary

	Ref.	Data				
	Des.	<u>Element</u>	<u>Name</u>		<u>Att</u>	<u>tributes</u>
Must Use	MEA02	738	Measuremen	Qualifier	0	ID 1/3
			Code identifying	a specific product or process characterist	ic to which a measurer	nent applies
			MU	Multiplier		
Must Use	MEA03	739	Measuremen	t Value	X	R 1/20
			The value of the r	neasurement		

Represents the meter constant when MEA02 equals "MU". When the multiplier

equals 1, do not send this MEA segment.

Segment: MEA Measurements (ZA=Power Factor)

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.

PA Use:	Not Used
NJ Use:	Required for non-interval meters that have a meter multiplier other than 1 if this is a transaction containing interval and non-interval data; otherwise, not used. Note: It is only required if it is used in the calculation of the customer's bill. This is only relevant and should only ever be sent with Demand (K1). If not present with a demand quantity, it should be assumed to be 1.
DE Use:	Not Used
MD Use:	Not Used
Example:	MEA**ZA*.95

Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Name Measurement Qua Code identifying a specif	lifier The product or process characteristic to which a me	O	ributes ID 1/3 nent applies
			ZA	Power Factor Relationship between watts and volt - necessary to supply electric load	ampe	res
Must Use	MEA03	739	Measurement Value The value of the measure		X	R 1/20
			-	er Factor when MEA02 equals "ZA". Very the value is 1, do not send this MEA sea		

 $Segment: \quad MEA \ \ Measurements \ (CO=Transformer \ Loss \ Multiplier)$

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.

PA Use:	Not Used
NJ Use:	Required for non-interval meters when Transformer Loss is not calculated by the meter if this is a transaction containing interval and non-interval data; otherwise, not used. Note: It is only required if it is used in the calculation of the customer's bill. This is only relevant and should only ever be sent with Demand (K1). If not present with a demand quantity, it should be assumed to be 1.
DE Use:	Not Used
MD Use:	Not Used
Example:	MEA**CO*1.02

Must Use	Ref. <u>Des.</u> MEA02	Data Element 738	Name Measurement Qua Code identifying a speci	alifier fic product or process characteristic to which a me	O	ributes ID 1/3 nent applies
			CO	Transformer Loss Multiplier		
				When a customer owns a transformer transformer loss is not measured by th		
Must Use	MEA03	739	Measurement Value of the Measurement Value of		X	R 1/20
			Represents the Tran	nsformer Loss Multiplier when MEA02	equal	s "CO".

Segment: **PTD** Product Transfer and Resale Detail (SU=Account Services 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.

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

Semantic Notes:

Comments:

Comments.	
Notes:	Account Services Summary
	This loop is always used in conjunction with the Account Services Detail loop (PTD01=BQ). It is used when the metering agent is reporting interval data at the account level.
	Note: All "Use" fields for this PTD loop are relevant only if this PTD loop (PTD01=SU)
	is used.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	PTD*SU

Data Element Summary

Must Use	Ref. <u>Des.</u> PTD01	Data Element 521	Name Product Transfer Code identifying the type	• •	Attributes M ID 2/2
			SU	Summary	
				Account Services Summary	

Note:

Refer to the "PTD Loops Definition and Use" section earlier in this document for an explanation of this specific PTD Loop.

 $Segment: \quad DTM \ \, \text{Date/Time Reference (150=Service Period Start)}$

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

3 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	otes: This date reflects the end of the date range for this meter for this billing period.			
	Note: The Service Period Start Date and Service Period End Date in the Account			
	Services Summary loop <u>must</u> match the dates in the Account Services Detail loop.			
PA Use:	Required			
NJ Use:	Required			
DE Use:	Required			
MD Use:	Required			
Example:	DTM*150*19990101			

	Ref.	Data	3. 7			. • • •
Must Use	<u>Des.</u> DTM01	<u>Element</u> 374	Name	vol:Gov		tributes ID 3/3
Must Use	DIMINI	3/4	Date/Time Que Code specifying ty	ype of date or time, or both date and time	M	ID 3/3
			150	Service Period Start		
Must Use	DTM02	373	Date		X	DT 8/8
			Date expressed as	CCYYMMDD		

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

3 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the end of the date range for this meter for this billing period.			
	Note: The Service Period Start Date and Service Period End Date in the Account			
	Services Summary loop <u>must</u> match the dates in the Account Services Detail loop.			
PA Use:	Required			
NJ Use:	Required			
DE Use:	Required			
MD Use:	Required			
Example:	DTM*151*19990131			

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

Segment: 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:	N/A
NJ Use:	Used by PSEG. If only one channel is used, this will still be sent.
DE Use:	N/A
MD Use:	N/A
Example:	REF*6W*1

Data Element Summary Ref. **Data Element Attributes** Des. Name **Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification 6W Sequence Number Channel Number X AN 1/30 **Must Use** REF02 127 **Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Channel Number

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:	There will be one QTY loop for each of the QTY03 Units of Measurement listed below
	that are measured on this account when interval data is being provided at the Account
	level.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	QTY*QD*22348*KH

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	$\overline{\text{QTY01}}$	673	Quantity Qualifier	$\overline{\mathrm{M}}$ 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	teasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			K3	Kilovolt Amperes Reactive Hour (kVARH)
				Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
			KH	Kilowatt Hour

Segment: PTD Product Transfer and Resale Detail (BQ=Account Services Detail)

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

Max Use: 1

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

provide identifying data

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

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

Semantic Notes:

Comments:

account
)1=BQ)
a

Data Element Summary

Must Use	Ref. <u>Des.</u> PTD01	Data <u>Element</u> 521	Name Product Transfer Code identifying the typ		Attributes M ID 2/2
			BQ	Other	
				Account Services Detail	
				Issue from inventory, when a specific re	eason type is not
				otherwise provided	

Note:

Refer to the "PTD Loops Definition and Use" section earlier in this document for an explanation of this specific PTD Loop.

 $Segment: \quad DTM \ \, \text{Date/Time Reference (150=Service Period Start)}$

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	This date reflects the end of the date range for this meter for this billing period.
	Note: The Service Period Start Date and Service Period End Date in the Account
	Services Summary loop <u>must</u> match the dates in the Account Services Detail loop.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	DTM*150*19990101

	Ref.	Data				
	Des.	Element	<u>Name</u>		At	<u>tributes</u>
Must Use	$\overline{DTM01}$	374	Date/Time Q	ualifier	$\overline{\mathbf{M}}$	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		

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Committee			
Notes:	Notes: This date reflects the end of the date range for this meter for this billing period.		
	Note: The Service Period Start Date and Service Period End Date in the Account		
	Services Summary loop <u>must</u> match the dates in the Account Services Detail loop.		
PA Use:	Required		
NJ Use:	Required		
DE Use:	Required		
MD Use:	Required		
Example:	DTM*151*19990131		

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

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.

8 If either C04003 or C04004 is present, then the other is required.
9 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

Notes:	The use of this segment allows the receiver to know the interval length being sent.
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	REF*MT*KH015

Data Element Summary

Must Use	<u>Des.</u> REF01	Element 128	Name Reference Identification Qualifier Code qualifying the Reference Identification		Att:	ributes ID 2/3	
			MT	Meter Type			
Must Use	REF02	127	Reference informat	Reference Identification X Reference information as defined for a particular Transaction Set or as specified dentification Qualifier			
			When REF01 is MT, the meter type is expressed as a five-c two characters are the type of consumption, the last three charactering interval. Since this value ties to the consumption value "COMBO" is not valid. Valid values can be a combin values:			naracters are the being reported, the	

	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

For Example:

KHMON Kilowatt Hours Per Month

K1015 Kilowatt Demand per 15 minute interval

REF Reference Identification (6W=Channel Number) **Segment:**

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

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

Comments:

PA Use:	N/A
NJ Use:	Used by PSEG. If only one channel is used, this will still be sent.
DE Use:	N/A
MD Use:	N/A
Example:	REF*6W*1

Must Use	Ref. <u>Des.</u> REF01	Data Element 128	Reference Identifi	ication Qualifier e Reference Identification	Attı M	ributes ID 2/3
			6W	Sequence Number		
				Channel Number		
Must Use	REF02	127	Reference Identifi	ication	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
			Channel Number			

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.

10 Only one of QTY02 or QTY04 may be present.

Semantic Notes: 1 QTY04 is used when the quantity is non-numeric.

Comments:

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	QTY*QD*87*KH

			Data Eleme	ent Summary
	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type	
			17	Incomplete Quantity Delivered
				Used when multi-metered account rolled up and at least
				one of the meters is not available.
			19	Incomplete Quantity Received (Net Metering)
				Used when multi-metered account rolled up, at least one
				of the meters is not available and the total is net
				generation.
			20	Unavailable
				Used when meter data is not available to fill the
			0.7	intervals.
			87	Actual Quantity Received (Net Metering)
				Used when the net generation quantity received is
			06	actual.
			96	Non-Billable Quantity
				Indicates this quantity and interval are outside of the actual bill period
			9H	Estimated Quantity Received (Net Metering)
				Used when the net generation quantity received is
				estimated.
			KA	Estimated Quantity Delivered
				Used when the quantity delivered is an estimated
				quantity.
			QD	Actual Quantity Delivered
				Used when the quantity delivered is an actual quantity.
Must Use	QTY02	380	Quantity Numeric value of quantity	X R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	reasurement 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: DTM Date/Time Reference (582=Report Period)

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.

11 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

Notes:	End date and time of the period for which the quantity is provided. Time will include				
	zone. Each interval must be explicitly labeled with the date and time.				
PA Use:	Required				
NJ Use:	Not Used				
DE Use:	Not Used				
MD Use:	Required				
Example:	DTM*582*19990115*1500*ES				

Data Element Summary

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualifier Code specifying type of date or time, or both date and time		At:	tributes ID 3/3
			582	Report Period		
				The date/time of the end of the interval	1.	
Must Use	DTM02	373	Date Date expressed as CC	YYMMDD	X	DT 8/8
Must Use	DTM03	337	Time X Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or H HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer sec DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (hundredths (00-99)		or HHN r secon	ds (00-59) and
			HHMM format			
Must Use	DTM04	623	Time Code		0	ID 2/2

Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

The time code must accurately provide the time zone when the daylight savings time starts and ends if the meter is adjusted for daylight savings time. If meter is not adjusted for daylight savings time, the time code will always reflect Eastern Daylight Time which will be interpreted as prevailing time.

ED Eastern Daylight Time
ES Eastern Standard Time

 $\textbf{Segment:} \quad \textbf{PTD} \ \textbf{Product Transfer and Resale Detail (BC=Unmetered Services Summary)}$

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:

Notes:	PTD Loops may be sent in any order.			
PA Use:	Not Used			
NJ Use:	Not Used			
DE Use:	Not Used			
MD Use:	Required if there are unmetered services on this account.			
Example:	PTD*BC			

Data Element Summary

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	ributes
Must Use	PTD01	521	Product Tran	nsfer Type Code	M	ID 2/2
			Code identifying	the type of product transfer		
			BC	Unmetered Services Summary		

Note:

Refer to the "PTD Loops Definition" section earlier in this document for an explanation of this specific PTD Loop.

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

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

PA Use:	Not Used	
NJ Use:	Not Used	
DE Use:	Not Used	
MD Use:	Required if there are unmetered services on this account	
Example:	DTM*150*19990101	

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	DTM01	374	Date/Time Qu	ıalifier	\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		

Segment: DTM Date/Time Reference (151=Service Period End)

Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10

Purpose: To specify pertinent dates and times

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.

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:	Not Used	
NJ Use:	ot Used	
DE Use:	Not Used	
MD Use:	Required if there are unmetered services on this account	
Example:	DTM*151*19990131	

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	DTM01	374	Date/Time Q	ualifier	\mathbf{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	CCYYMMDD	X	DT 8/8

Segment: QTY Quantity

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

Max Use:

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:	This loop is required when there are unmetered services on the account. This will contain		
	the total quantity for the unmetered services.		
PA Use:	Not Used		
NJ Use:	Not Used		
DE Use:	Not Used		
MD Use:	Required is there are unmetered services on the account		
Example:	QTY*QD*500*KH		

Must Use	Ref. <u>Des.</u> QTY01	Data Element 673	Name Quantity Qualifier Code specifying the type	
			QD	Actual Quantity Delivered
				Used when the quantity delivered is an actual quantity.
				All States: Whether unmetered services are estimated,
				calculated, or actual, they will be coded as actual.
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	Ieasurement Code Sin which a value is being expressed, or manner in which a measurement
			99	Watts
			K1	Kilowatt Demand (kW)
			KH	Kilowatt Hour

Interval Usage Examples

Example 1: Interval Detail reporting at the SUMMARY Level

BPT*00*REF01-990201*19990201*C1	Meter detail loop
DTM*649*19990203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*D1*12345*KH	Monthly billed kWh
QTY*D1*50*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*12345*KH	Calculated summary of all metered for kWh / kvarh only

Example 2: Interval Detail reporting at the ACCOUNT Level

BPT*00*REF01-000201*20000201*C1	Meter detail loop
DTM*649*20000203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*D1*123456*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*SU	Account services Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*QD*123456*KH	Calculated summary of all metered for kWh / kvarh only
PTD*BQ	Account Services Detail Loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MT*KH030	Meter Type
QTY*QD*112*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*QD*232*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*QD*248*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*QD*789*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2330*ES	End date and time of the period for which the quantity is provided.

QTY*QD*730*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2359*ES	End date and time of the period for which the quantity is provided.

Example 3: Interval Detail reporting at the METER Level

BPT*00*REF01-000201*20000201*C1	Meter detail loop
DTM*649*20000203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*D1*123456*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*BO	Metered Services Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MG*2222277S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*123456*KH	Calculated summary of all metered for kWh / kvarh only
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MG*2222277S	Meter Number
REF*MT*KH030	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20000101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*QD*128*KH	Consumption
DTM*582*20000101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*QD*216*KH	Consumption
DTM*582*20000101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified below	
QTY*QD*789*KH	Consumption
DTM*582*20000131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20000131*2359*ES	End date and time of the period for which the quantity is provided.

Example 4: Renewable Energy Provider - Interval Detail reporting

Note: The only difference between an ESP and a Renewable Energy Provider is the use of N1*SJ for an ESP and the use of N1*G7 for a Renewable Energy Provider. The details are not shown since all of the examples that are valid for an ESP are valid for a Renewable Energy Provider.

BPT*00*REF01-000201*20000201*C1	Meter detail loop
DTM*649*20000203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company

N1*G7*RENEWABLE ENERGY COMPANY*9*007909422ESP1	Renewable Energy Provider Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*D1*123456*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
Continued on until the end of the transaction. Details may vary depending on whether this is a Summary level, an	
Account level, or a Meter level transaction.	

<u>Example 5: Interval Detail reporting at the ACCOUNT Level – with net metering (Channel indicator)</u>

BPT*00*REF01-000201*20000201*C1	Account detail loop
DTM*649*20000203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*D1*123456*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*SU	Account services Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*6W*1	Inbound usage
QTY*QD*123456*KH	Calculated summary of all metered for kWh / kvarh only
PTD*BQ	Account Services Detail Loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MT*KH030	Meter Type
REF*6W*1	Inbound usage
QTY*QD*112*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*QD*232*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*QD*248*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified below	
QTY*QD*789*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2359*ES	End date and time of the period for which the quantity is provided.
PTD*SU	Account services Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*6W*2	Outbound usage
QTY*87*2045*KH	Calculated summary of all metered for kWh / kvarh only
PTD*BQ	Account Services Detail Loop
	-

DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MT*KH030	Meter Type
REF*6W*2	Outbound usage
QTY*87*18*KH	Quantity of consumption generated for entire metering period specified
DTM*582*20000101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*62*KH	Quantity of consumption generated for entire metering period specified
DTM*582*20000101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*178*KH	Quantity of consumption generated for entire metering period specified
DTM*582*20000101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified below	
QTY*87*0*KH	Quantity of consumption generated for entire metering period specified
DTM*582*20000131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*87*8*KH	Quantity of consumption generated for entire metering period specified
DTM*582*20000131*2359*ES	End date and time of the period for which the quantity is provided.

867IU Net Meter less than consumption with Inc BPT*00*REF01-000201*20000201*C1	Meter detail loop
DTM*649*20000201*20000201*C1	This is only required on Bill Ready Consolidated Billing scenarios. Time is
D1W1*049*20000203*1700	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20000101	, , ,
DTM*150*20000101 DTM*151*20000131	Start period End period
	*
QTY*D1*2548*KH	Monthly billed kWh
PTD*SU	Account services Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*QD*2548*KH	Calculated summary of all metered for kWh / kvarh only
PTD*BQ	Account Services Detail Loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MT*KH030	Meter Type
QTY*87*312*KH	Net Meter quantity received for entire metering period specified
DTM*582*20000101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*232*KH	Net Meter quantity received for entire metering period specified
DTM*582*20000101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*19*166*KH	Incomplete Net Meter quantity received for entire metering period
	specified
DTM*582*20000101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*QD*402*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*187*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2359*ES	End date and time of the period for which the quantity is provided.

<u>Example 6 - Multiple Services, Metered and Unmetered (Maryland only)</u>

Metered consumption = 123456, Unmetered consumption is 1000.

BPT*00*PEP86720000201200008934771062*20000201*C1	Meter detail loop
DTM*649*20000204*1600	This is only required on Bill Ready Consolidated Billing
	scenarios. Time is always represented as Eastern
	prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*1*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer Name
REF*11*1394959	ESP Account number
REF*12*111111111	LDC Account number
REF*BLT*LDC	Bill Type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*D1*124456*KH	Monthly billed kWh
OTY*D1*450*K1	Monthly derived demand
QTY*D1*29*K1	Monthly measured demand
PTD*SU	Account services Summary loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*QD*123456*KH	Calculated summary for all metered kWh/kvarh only
PTD*BQ	Account Services Detail loop
DTM*150*20000101	Start period
DTM*151*20000131	End period
REF*MT*KH060	Meter Type
QTY*QD*0.219*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0100*ES	End date and time of the period for which the quantity is provided
QTY*QD*0.2124*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000101*0200*ES	End date and time of the period for which the quantity is
QTY*QD*0.1776*KH	Provided Quantity of consumption delivered for entire metering
DTM*582*20000101*0300*ES	period specified End date and time of the period for which the quantity is
	provided
Continued on until the end date of the period specified below	
QTY*QD*0.3774*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20000131*2359*ES	End date and time of the period for which the quantity is provided
PTD*BC	Unmetered Services Summary
DTM*150*20000101	Start period
DTM*151*20000131	End period
QTY*QD*1000*KH	Unmetered consumption

Pennsylvania Net Metering / Customer Generation Examples

Interval Detail reporting at the ACCOUNT Level – with net metering (Consumption greater than generation)

BPT*00*REF01-120201*20120201*C1	Account detail loop
DTM*649*20120203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*11111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*D1*123456*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*SU	Account Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*QD*123456*KH	Calculated summary of all metered for kWh / kvarh only
PTD*BQ	Account Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MT*KH030	Meter Type
QTY*QD*101*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*232*KH	Quantity of generation delivered for entire metering period specified
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*248*KH	Quantity of generation delivered for entire metering period specified
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*QD*789*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.

Interval Detail reporting at the ACCOUNT Level – with net metering (Generation greater than consumption)

<u> </u>	el – with net metering (Generation greater than consumption)
BPT*00*REF01-120201*20120201*C1	Account detail loop
DTM*649*20120203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*11111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*D1*0*KH	Monthly billed kWh - ZERO
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*SU	Account Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*87*1066*KH	Calculated summary of all metered for kWh (net generation)
PTD*BQ	Account Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MT*KH030	Meter Type
QTY*QD*101*KH	Quantity of consumption delivered for entire metering period specified
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*232*KH	Quantity of generation delivered for entire metering period specified
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*248*KH	Quantity of generation delivered for entire metering period specified
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*87*789*KH	Quantity of generation delivered for entire metering period specified
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*87*730*KH	Quantity of generation delivered for entire metering period specified
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.

Interval Detail reporting at the METER Level – SINGLE Meter registering both generation & consumption with net metering (Consumption greater than generation) NOT USED by any PA EDC.

BPT*00*REF01-000201*20120201*C1	Meter detail loop
DTM*649*20120203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*11111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*D1*123456*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*BO	Metered Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*2222277S	Meter Number
REF*JH*A	Meter Role - Additive
REF*IX*6.0	Number of dials or digits
QTY*QD*123456*KH	Calculated summary of all metered for kWh / kvarh only
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*87667144	Meter Number
REF*MT*KH030	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*QD*128*KH	Consumption
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*216*KH	Generation
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*QD*789*KH	Consumption
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.

Interval Detail reporting at the METER Level – SINGLE Meter registering both generation & consumption with net metering (Generation greater than consumption) NOT USED by any PA EDC.

BPT*00*REF01-000201*20120201*C1	Meter detail loop
DTM*649*20120203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*11111111111111	LDC Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*D1*0*KH	Monthly billed kWh - ZERO
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*BO	Metered Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*2222277S	Meter Number
REF*JH*S	Meter Role - Subtractive
REF*IX*6.0	Number of dials or digits
QTY*87*1166*KH	Calculated summary of all metered for kWh (net generation)
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*87667144	Meter Number
REF*MT*KH030	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*128*KH	Generation
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*216*KH	Generation
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*87*789*KH	Generation
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.

$Interval\ Detail\ reporting\ at\ the\ METER\ Level-TWO\ Meters, one\ for\ generation\ \&\ another\ for\ consumption\ with\ net\ metering\ (Consumption\ greater\ than\ generation)\ PECO\ only\ when\ EGS\ requests\ meter\ detail\ via$ 814E/C

014E/C	
BPT*00*REF01-000201*20120201*C1	Meter detail loop
DTM*649*20120203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
KEF*BLI*LDC	ын туре
DED#DO#DIIAI	PULC 1 1
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*D1*83000*KH	Monthly billed kWh
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*BO	Metered Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*2222277S	Meter Number
REF*JH*S	Meter Role - Subtractive
REF*IX*6.0	Number of dials or digits
QTY*87*5000*KH	Calculated summary of all metered for kWh / kvarh only
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20120101	Start period
	<u> </u>
DTM*151*20120131	End period
REF*MG*2222277S	Meter Number
REF*MT*KH030	Meter Type
QTY*87*112*KH	Generation
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*128*KH	Generation
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*216*KH	Generation
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	End date and time of the period for which the quantity is provided.
below	
QTY*87*789*KH	Generation
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*87*730*KH	Generation
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.
PTD*BO	Metered Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120101	End period
REF*MG*87667144A	Meter Number
	Meter Nole - Additive
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*87000*KH	Calculated summary of all metered for kWh / kvarh only
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*87667144A	Meter Number
REF*MT*KH030	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*QD*128*KH	Consumption

DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*QD*216*KH	Consumption
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified below	
QTY*QD*789*KH	Consumption
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.

$Interval\ Detail\ reporting\ at\ the\ METER\ Level-TWO\ Meters, one\ for\ generation\ \&\ another\ for\ consumption\ with\ net\ metering\ (Generation\ greater\ than\ consumption)\ PECO\ only\ when\ EGS\ requests\ meter\ detail\ via$ 814E/C

814E/C	
BPT*00*REF01-000201*20120201*C1	Meter detail loop
DTM*649*20120203*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is
	always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*11*1394959	ESP Account number
REF*12*1111111111111	LDC Account number
REF*BLT*LDC	Bill type
DEE#DO#DIIAI	Pil C L L
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*D1*0*KH	Monthly billed kWh - ZERO
QTY*D1*450*K1	Monthly derived demand
QTY*QD*29*K1	Monthly measured demand
PTD*BO	Metered Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*2222277S	Meter Number
REF*JH*S	Meter Role - Subtractive
REF*IX*6.0	Number of dials or digits
QTY*87*5000*KH	Calculated summary of all metered for kWh (net generation)
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*87667144	Meter Number
REF*MT*KH030	Meter Type
QTY*87*112*KH	Generation
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*87*128*KH	Generation
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
QTY*87*216*KH	Generation
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified	
below	
QTY*87*789*KH	Generation
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*87*730*KH	Generation
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.
PTD*BO	Metered Services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*87667144A	Meter Number
REF*JH*A	Meter Number Meter Role - Additive
REF*IX*6.0	Number of dials or digits
QTY*QD*4000*KH	Calculated summary of all metered for kWh / kvarh only
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA**CO*1.02	Transformer Loss Multiplier
PTD*PM	Meter Services Detail Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*87667144A	Meter Number
REF*MT*KH030	Meter Type
QTY*QD*112*KH	Consumption
DTM*582*20120101*0030*ES	End date and time of the period for which the quantity is provided.
QTY*QD*128*KH	Consumption
DTM*582*20120101*0100*ES	End date and time of the period for which the quantity is provided.
D101 302 20120101 0100 ED	

QTY*QD*216*KH	Consumption
DTM*582*20120101*0130*ES	End date and time of the period for which the quantity is provided.
Continued on until the end of the period specified below	
QTY*QD*789*KH	Consumption
DTM*582*20120131*2330*ES	End date and time of the period for which the quantity is provided.
QTY*QD*730*KH	Consumption
DTM*582*20120131*2359*ES	End date and time of the period for which the quantity is provided.