Pennsylvania
New Jersey
Delaware
Maryland

Implementation Guideline

For

Electronic Data Interchange

TRANSACTION SET

867

Monthly Usage
Ver/Rel 004010

Table of Contents

	Summary of Changes
June 29, 1999 Version 1.0	Initial Release. Changes since last draft: • Changed "EGS" to "ESP" and "EDC" to "LDC" throughout the guideline. Removed "NJ Definitions" and replaced it with "LDC Definitions" and "ESP Definitions" in the Notes section. • Added "How to use the implementation guideline" page. In addition, changed all headers to the true X12 definition. Also corrected the Table on Page 4 to reflect X12 definitions and added the words "X12 Structure" to the title on that page.
July 1, 1999 Version 1.1	• Removed Code 77 from the BPT07 and modified code F to indicate that it is used when the customer account finals in addition to if the customer switched to a new ESP. • Clarified that Document Due Date is not provided for cancel transaction. • Added "Must Use" to MEA07 per the data dictionary. • Added "… if the LDC reads the meter" to the requirements for the PTD*BB Loop.
October 1, 1999 Version 1.1a	• Add Delaware Use for Delmarva • Add BPT04 code to indicate this is for Summary Data only for an Interval customer. • Added clarification to use of DTM*649 to indicate it should only be used for Bill Ready. It is not valid for Rate Ready or Dual Billing.
November 4, 1999 Version 1.2	This is a FINAL version for Pennsylvania and New Jersey
November ??, 1999 Draft version 1.2MD1	• Add Maryland use to document – the changes were added to the version 1.2 of the regional standards • Added Table of Contents • Added Data Dictionary
December 23, 1999 Version 1.2MD2	• Clarified use of X4 code for Maryland • Noted that BGE can only provide billed demand
January 17, 2000 Version 1.2MD3	• Clarified setting of DTM*649 for ESP consolidated bill • Clarified REF*45 is only used when LDC sends transaction.
April 20, 2000 Version 1.2MD4	• Clarified APS use of REF*45 in MD • Incorporate PA Change Control X015 to add X5 as a valid value for BPT04 • Removed comment on mandatory use of PTD*BD loop for PA by 3/2000. This is being discussed as part of PA Change Control X018. While it is not determined if there are cases when this loop may be needed, it was agreed that it will not be mandatory by 3/2000. • Add PA Notes Section • Add MD Notes Section
May 17, 2000 Version 1.2MD5	• Incorporate PA Change Control X023 – allow PM loop to be optional on a cancellation
May 30, 2000 Version 1.2MD6	• Incorporate PA Change Control X018 – remove BD loop. PA decided this loop would not be used, and PA was the only state that intended to use this loop.
June 26, 2000 Version 1.2MD7	• Added clarity to Meter Multiplier and Transformer Loss Multiplier definitions in Data Dictionary • Added clarity to example titles
August 14, 2000 Version 1.2MD8	• Add NJ Notes Section • Add Note for PSE&G on BPT07 • Added NJ Note for MEA05
September 10, 2000 Version 1.3	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware (Delmarva only).
October 19, 2001 Version 1.3rev01	• Incorporate Delaware Electric Coop (DEC) information for Delaware

December 13, 2001 Version 1.3rev02	• Incorporate PA Change Control 038 – change all references of PPL to PPL EU. • 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 2.0	• Incorporate SMECO specific data for MD (MD Change Control 003) This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
January 20, 2006 Version 2.0.1D	• Incorporate NJ Change Control 005 (NJ CleanPower program changes) • Incorporate PA Change Control 039 to reflect "generated usage" • Incorporate NJ Change Control 006 to reflect current operations
October 23, 2006 Version 2.0.2D	▪ 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 2.0.3F	▪ Considered FINAL for PA and NJ
February 22, 2009 Version 2.0.4D	▪ Incorporate NJ Change Control PSEG-E-Ref45
January 24, 2010 Version 2.1	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
September 8, 2010 Version 2.1.1D	• Incorporate PA Change Control 060 – (PA Admin/Cleanup) • Incorporate MD Change Control – Admin (Admin/Cleanup for MD)
February 28, 2011 Version 3.0	This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware.
February 16, 2012 Version 3.01	• Incorporate PA Change Control 093 (Admin Changes) • 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)

General Notes

PTD Loops Definition

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.

Monthly Billed Summary Information (PTD=BB): This loop is always required for every type of account if the LDC reads the meter.

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

Metered Services Information (PTD01 = SU and PM) – These loops are used to convey the usage for metered data, at both a detail level by meter by unit of measure (PTD01=PM) and for some units of measure, at a summary level for all meters (PTD01=SU).

> **Metered 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=PM. The PTD01=SU loop will NEVER be provided for kW or KVAR.

> **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. In the case of one meter reporting one unit of measure (kWh), the PTD01=PM will be the same as the PTD01=SU and both must be provided. If you have two meters and each meter measures kW and kWh, you will send one PTD SU Loop. The kWh readings from Meter 1 and Meter 2 will be summed and provided in one PTD SU Loop.

Unmetered Services Information (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).

> **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 at this time for Unmetered Services.

Cancellations

- The MEA is an optional segment on a cancellation.
- Cancel 867s will be by metering period, i.e. same as the original 867's. Rebills may be for multiple periods.
- The "from" and "to" dates on the cancel must match exactly with the original usage.
- On a cancellation, the signs are not reversed (don't change positive usage to negative usage). Quantities will not be negative on Cancels. Cancels should be interpreted as negative consumption.
- The consumption sent in the cancel must match the consumption sent in the original transaction.
- Cancels must be sent at the same level of detail as the original usage.
  - PA: Cancels must include all account and summary information, however, it is optional to include the PM loops.

Restatements	• In order to restate usage for a period, the metering party must first completely cancel all usage for that period; then send the full set of restatement transactions. • If you receive a cancellation, you will not necessarily receive a restatement (i.e. if the data was sent to you in error in the first place). • The "from" and "to" dates on the restatement transactions do not have to match the corresponding original or cancel transactions for the same period. • Restatements across multiple cycles may match original from and to dates or may cross bill cycles. • An 867 cancel can be followed by an 867 original the next month. The metering period would include the metering period from the cancelled and the current usage.
Reporting of usage if supplier is not providing 100% of generation	The usage information provided in the 867 is the total usage not the prorated information. Meter reading party will always send total consumption rounded to nearest kWh.
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.
Total Usage is sent, even if supplier is not providing 100% of load.	The usage information provided in the 867 is the total usage not the prorated information. Meter reading party will always send total consumption rounded to nearest kWh. It is the obligation of the receiving party to apply their participation percentage to the total provided to determine their actual obligation. If the decimal is .50000 or less, it will go to the lower whole number; if the decimal is .50001 or greater, it will go to the next higher whole number).

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.

Pennsylvania:
- 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 "X4").
- 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 customers.

Requirements for uniform support of Net Metered Customers:

- BB (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.
  3. In either scenario, the QTY02 will never be signed negative.
- SU (Metered Services Summary) Loop –reports the summary usage for net metered customers.
  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.

Requirements for uniform support of Net Metered Customers (continued):

- PM (Meter Services Detail) Loop – The meter loop will report the meter level detail for net metered customers.   This may be done via one of the three following configurations:

1.   Single meter reporting both in and out flow.   The PM loop for KH will be repeated, one reporting consumption and one reporting generation.   Used by First Energy, PPL (MV90 only), and Duquesne Light.
    a.   The meter number will be identical for each loop.
    b.   In the consumption loop, the meter role (REF*JH) will be 'A' (additive) and the KH usage will be reported in quantity delivered (actual = QD or estimated = KA).
    c.   In the generation loop, the meter role (REF*JH) will be 'S' (subtractive) and the KH usage will be reported as net generation delivered (actual = 87 or estimated = 9H).
    d.   The QTY02 will never be signed negative
    e.   Being this is a single meter, the meter attributes will remain the same for both PM loops.

2.   Single meter reporting only the net consumption, one PM loop for KH. Used by PPL only (non-MV90)
    a.   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).   The meter role (REF*JH) will be 'A' (additive).
    b.   When customer's generation is greater than consumption, the KH usage will be reported as net generation delivered (actual = 87 or estimated = 9H).   The meter role (REF*JH) will be 'S' (subtractive).
    c.   The QTY02 will never be signed negative.

3.   Separate meters, one reporting inflow and another meter reporting outflow. The PM loop will be repeated for KH, one meter reporting consumption and one meter reporting generation.   Used by PECO and UGI.
    a.   The meter number should be unique for each KH loop. The meter attributes for each KH loop may have different values.
    b.   In the consumption loop, the meter role (REF*JH) will be 'A' (additive) and the KH usage will be reported in quantity delivered (actual = QD or estimated = KA).
    c.   In the generation loop, the meter role (REF*JH) will be 'S' (subtractive) and the KH usage will be reported as net generation delivered (actual = 87 or estimated = 9H).
    d.   The QTY02 will never be signed negative.

New Jersey Notes

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 / Rebill 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 / rebill is processed. The process for Cancel/ Rebill 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) rebill 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 rebilled 867(s).

Net Metering:

- PSE&G- Is currently using a bi-directional meter for the TPS's and providing the in reading as well as the out reading to the EDI process. For Clean Power suppliers a watt-hour meter which goes both ways ultimately providing the net usage to the EDI process.

- 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

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.

Note: Beginning 4/1/2012, PEPCO requires the LIN05 "SI" be populated on the enrollment transaction for Smart Metered billed accounts if the supplier wants interval data at the summary level (an 867MU will be sent). The supplier may send PEPCO a change transaction LIN05 = 'SI' with REF17 indicating the usage format desired (Summary or Detail). If the LIN05 "SI" segment is not present on the enrollment transaction, the supplier will receive meter usage at a detail (867IU) level.

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 – Supplier will receive 867MU for summary, and detail will be posted on their website for non-AMI/Smart Meter interval billed interval accounts. As of 4/1/2012, by default, the Supplier will receive 867IU for all AMI/Smart Meter interval billed accounts (unless supplier has requested summary data).
- 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").

How to Use the Implementation Guideline

Segment:	**REF** Reference Identification	
Position:	030	
Loop:	LIN	
Level:	Detail	
Usage:	Optional	
Max Use:	>1	
Purpose:	To specify identifying information	
Syntax Notes:	1 At least one of REF02 or REF03 is required.	
	2 If either C04003 or C04004 is present, then the other is required.	
	3 If either C04005 or C04006 is present, then the other is required.	
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.	
Comments:		

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

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

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

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

> One or more examples.

Data Element Summary

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

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

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

> This column shows the X12 attributes for each data element. Please refer to Data Dictionary for individual state rules.
>
> M = Mandatory, O= Optional, X = Conditional
>
> AN = Alphanumeric, N# = Decimal value, ID = Identification, R = Real
>
> 1/30 = Minimum 1, Maximum 30

867 Product Transfer and Resale Report
X12 Structure

Functional Group ID=PT

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	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	O	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	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		

Summary:

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

Data Dictionary for 867 Monthly Usage

Appl Field	Field Name	Description	EDI Segment	Related EDI Qualifier	Data Type
		867 Monthly Usage			
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	"DD" Monthly Usage "X4" Summarized data for interval account at account level "X5" Summarized data for interval account at meter level "KJ" Meter Changeout when Meter Agent Changes – Monthly Usage (used to tell the receiver that this is a partial usage statement. The billing agent must sum the KJ usage and the DD usage to calculate the bill.)	BPT04	BPT01	X(2)
5	Final Indicator	Indicates if this is a final reading for that particular ESP (e.g., customer moves, customer switches, etc.).	BPT07 = **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. 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.)	DTM02 (CCYYMMDD) and DTM03(HHMM)	DTM01= **649**	DTM02= 9(8) and DTM03= 9(4)
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).99999
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 = **SJ**	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	Renewable Energy Provider 's Name	N102	N1: N101 =	X(60)

	Provider Name			**G7**	
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	LDC Account Number	LDC Customer Account Number	REF02	N1: N101*8R Loop REF01 = **12**	X(30)
14.2	LDC Account Number - unmetered	LDC Customer Account Number – Unmetered	REF03	N1: N101 = **8R** REF01 = **12** REF03 = **U**	X(80)
15	Old Account Number	Previous LDC Customer Account Number	REF02	N1: N101*8R Loop REF01 = **45**	X(30)
16	ESP Account Number	ESP Customer Account Number	REF02	N1: N101*8R Loop REF01 = **11**	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 combinations.				
	Monthly Billed Summary - Loop Required if the LDC reads the meter				
This information is obtained from the billing system to reflect billing data for this account at the unit of measure level.					
19	Product Transfer Type	Monthly Billed Summary	PTD01= **BB**		X(2)
20	Service Period Begin 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)
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	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)
Metered Services Summary - Loop required if there are metered services on the account						
31	Product Transfer Type	Metered Services Summary	PTD01= **SU**			X(2)
32	Service Period Begin Date	Start date of the period for which the readings are provided	DTM02	DTM01 = **150**		9(8)
33	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = **151**		9(8)
34	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)
35	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)
36	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 metered services on the account						
37	Product Transfer Type	Metered Services Detail	PTD01= **PM**			X(2)
38	Service Period Begin Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = **150**		9(8)
39	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = **151**		9(8)
40	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**		X(12)
41	Meter Number	Serial number of this specific meter (may have multiple meters)	REF02	REF01 = **MG**		X(30)
42	LDC Rate Code	Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site	REF02	REF01 = **NH**		X(30)
43	LDC Rate Subclass Code	Used to provide further classification of a rate.	REF02	REF01= **PR**		X(30)
44	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)

45	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
46	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)
47	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)
48	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03		X(2)
49	Measurement Reference Code	Code identifying category to which measurement applies.	MEA01		X(2)
50	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)
51	Unit of Measure	Unit of measure for readings.	MEA04		X(2)
52	Beginning Reading	Value specifying beginning reading for the metering period. Factors have not been applied to this value.	MEA05		9(8).9(4)
53	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)
54	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07		X(2)
55	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)
56	Power Factor	Relationship between watts and volt - amperes necessary to supply electric load	MEA03	MEA02 = **ZA**	9(9).9(4)
57	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)
Unmetered Services Summary - Loop required if there are unmetered services on the account				
58	Product Transfer Type	Unmetered Services Summary	PTD01= **BC**		X(2)
59	Service Period Begin Date	Start date of the period for which the readings are provided	DTM02	DTM01 = **150**	9(8)
60	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = **151**	9(8)
61	Quantity Qualifier	Represents that the quantity is actual: **QD** = Actual Quantity Delivered	QTY01		X(2)

| 62 | Quantity Delivered | Represents quantity of consumption delivered for service period. | QTY02 | QTY01 | 9(10).9(4) |
| 63 | Quantity Delivered Unit of Measurement | Indicates unit of measurement for quantity of consumption delivered during service period. | QTY03 | | X(2) |

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

Data Element Summary

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

Segment:	**BPT** Beginning Segment for Product Transfer and Resale
Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data
Syntax Notes:	**1** If either BPT05 or BPT06 is present, then the other is required.
Semantic Notes:	**1** BPT02 identifies the transfer/resale number.
	2 BPT03 identifies the transfer/resale date.
	3 BPT08 identifies the transfer/resale time.
	4 BPT09 is used when it is necessary to reference a Previous Report Number.
Comments:	

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Examples:	BPT*00*199902010001*19990131*DD
	BPT*00*199902010001*19990131*DD***F
	BPT*01*199902020001*19990131*DD*****1999020100001

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	BPT01	353	**Transaction Set Purpose Code** Code identifying purpose of transaction set	**M**	**ID 2/2**

	00	Original
		Conveys original readings for the account being reported.
	01	Cancellation
		Indicates that the readings previously reported for the account are to be ignored.

	Ref. Des.	Data Element	Name	Attributes	
Must Use	BPT02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**O**	**AN 1/30**

A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.

PA: This code will be used as a cross reference to the 810 billing document, and for billing parties that make the other party whole, it will also be cross referenced on the 820.

	Ref. Des.	Data Element	Name	Attributes	
Must Use	BPT03	373	**Date** Date (CCYYMMDD)	**M**	**DT 8/8**

Transaction Creation Date – the date that the data is processed by the application system.

	Ref. Des.	Data Element	Name	Attributes	
Must Use	BPT04	755	**Report Type Code** Code indicating the title or contents of a document, report or supporting item	**O**	**ID 2/2**

	DD	Monthly Usage
		For monthly metered customers only (not interval metered customers).
	KJ	Meter Changeout when Meter Agent Changes – Monthly Usage
		For monthly metered customers only (not interval metered customers)

		X4	Summary Report (defined for PA and MD)		

For interval metered customers, when only summary data is being sent at the ACCOUNT level.
PA Note: Some utilities may not be able to comply with this until later since this was added so close to the 4010 implementation date. If the utilities can not comply day 1, the utility will send the code of "DD"
MD Note: Use of the "X4" code on the 867MU indicates the interval detail will be provided on the web.

		X5	Restricted Report		

For interval metered customers, when only summary data is being sent at the METER level.
PA Note: Mandatory implementation date is June 2000.

Conditional	**BPT07**	**306**	**Action Code**	**O**	**AN 1/2**

Code indicating type of action

		F	Final – Indicates Final Usage for specific ESP.		

Condition: 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

Condition: When this is a cancellation of usage, that is BPT01 = 01, 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:	
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 or 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 or Dual Billing
DE Use:	Required for Bill Ready, not used in Rate Ready or Dual Billing
MD Use:	Required for Bill Ready, not used in Rate Ready or Dual Billing
Examples:	DTM*649*19990131*2359

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM01	374	**Date/Time Qualifier**	M	ID 3/3
			Code specifying type of date or time, or both date and time		

649   Document Due

The date that the non-billing party must provide the 810 transaction back to the billing party.

If a file is received by the billing party after the date, and the billing party cannot process it, they must notify the non-billing party (via email, phone call, or any other means).

	Ref. Des.	Data Element	Name		Attributes
Must Use	DTM02	373	**Date**	X	DT 8/8
			Date expressed as CCYYMMDD		
Must Use	DTM03	337	**Time**	X	TM 4/8

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

HHMM format

Segment:	**MEA** Measurements (NP=Percent Participation)
Position:	075
Loop:	
Level:	Heading
Usage:	Optional
Max Use:	20
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 if less than 100%
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:	Not Used
Example:	MEA**NP*.66667

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	MEA02	738	**Measurement Qualifier**	O ID 1/3

Code identifying a specific product or process characteristic to which a measurement applies

NP   Percent Participation

This code is used to indicate the percentage of the total load that is 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).

	Ref. Des.	Data Element	Name	Attributes
Must Use	MEA03	739	**Measurement Value**	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.
	2 N105 and N106 further define the type of entity in N101.

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	N1*8S*LDC COMPANY*1*007909411

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N101	98	**Entity Identifier Code**	**M**	**ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual		
			8S Consumer Service Provider (CSP)		
			LDC		
Must Use	N102	93	**Name**	**X**	**AN 1/60**
			Free-form name		
			LDC Company Name		
Must Use	N103	66	**Identification Code Qualifier**	**X**	**ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)		
			1 D-U-N-S Number, Dun & Bradstreet		
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
Must Use	N104	67	**Identification Code**	**X**	**AN 2/20**
			Code identifying a party or other code		
			LDC D-U-N-S Number or D-U-N-S + 4 Number		

Segment:	$N1$ Name (SJ=ESP Name)
Position:	080
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	**1** At least one of N102 or N103 is required.
	2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	**1** This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
	2 N105 and N106 further define the type of entity in N101.

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

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**N101**	**98**	**Entity Identifier Code**	**M**	**ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual		
			SJ Service Provider		
			ESP		
Must Use	**N102**	**93**	**Name**	**X**	**AN 1/60**
			Free-form name		
			ESP Company Name		
Must Use	**N103**	**66**	**Identification Code Qualifier**	**X**	**ID 1/2**
			Code designating the system/method of code structure used for Identification Code (67)		
			1 D-U-N-S Number, Dun & Bradstreet		
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
Must Use	**N104**	**67**	**Identification Code**	**X**	**AN 2/20**
			Code identifying a party or other code		
			ESP D-U-N-S Number or D-U-N-S + 4 Number		

Segment: **N1** Name (G7=Renewable Energy Provider Name)
Position: 080
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.

PA Use:	Not used
NJ Use:	Required
DE Use:	Not used
MD Use:	Not used
Example:	N1*G7*RENEWABLE COMPANY*9*007909422GPM

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	N101	98	**Entity Identifier Code**	M	ID 2/3

Code identifying an organizational entity, a physical location, property or an individual
G7 Entity Providing the Service
Renewable Energy Provider

Must Use	N102	93	**Name**	X	AN 1/60

Free-form name
Renewable Energy Provider Company Name

Must Use	N103	66	**Identification Code Qualifier**	X	ID 1/2

Code designating the system/method of code structure used for Identification Code (67)
1 D-U-N-S Number, Dun & Bradstreet
9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix

Must Use	N104	67	**Identification Code**	X	AN 2/20

Code identifying a party or other code
Renewable Energy Provider D-U-N-S Number or D-U-N-S + 4 Number

Segment:	**N1** Name (8R=Customer Name)	
Position:	080	
Loop:	N1	
Level:	Heading	
Usage:	Optional	
Max Use:	1	
Purpose:	To identify a party by type of organization, name, and code	
Syntax Notes:	1	At least one of N102 or N103 is required.
	2	If either N103 or N104 is present, then the other is required.
Semantic Notes:		
Comments:	1	This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
	2	N105 and N106 further define the type of entity in N101.

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

Data Element Summary

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

Segment:	**REF** Reference Identification (12=LDC Account Number)
Position:	120
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
	2 If either C04003 or C04004 is present, then the other is required.
	3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	

PA Use:	Required
NJ Use:	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

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			12 Billing Account		
			LDC-assigned account number for the end use customer. Must appear as it does on the customer's bill excluding punctuation (spaces, dashes, etc.) Significant leading and trailing zeros must be included.		
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		
Optional	REF03	352	**Description**	X	AN 1/80
			A free-form description to clarify the related data elements and their content		
			U Unmetered		

Segment:	**REF** Reference Identification (45=LDC Old Account Number)	
Position:	120	
Loop:	N1	
Level:	Heading	
Usage:	Optional	
Max Use:	12	
Purpose:	To specify identifying information	
Syntax Notes:	1	At least one of REF02 or REF03 is required.
	2	If either C04003 or C04004 is present, then the other is required.
	3	If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1	REF04 contains data relating to the value cited in REF02.
Comments:		

PA Use:	Required if account number has changed within the last 60 days. **Note:** Only used when LDC is sending this transaction.
NJ Use:	Required if account number has changed within the last 60 days.
DE Use:	Not used
MD Use:	**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.
Example:	REF*45*939581900

Data Element Summary

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

Segment:	**REF** Reference Identification (11=ESP Account Number)
Position:	120
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
	2 If either C04003 or C04004 is present, then the other is required.
	3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	

PA Use:	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 previously 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

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
		11	Account Number		
			ESP-assigned account number for the end use customer.		
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		

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.
	2 If either C04003 or C04004 is present, then the other is required.
	3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	REF*BLT*LDC

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification	M ID 2/3

<div style="margin-left:2em">

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.
</div>

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

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.
	2 If either C04003 or C04004 is present, then the other is required.
	3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	REF*PC*LDC

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification	M ID 2/3

	PC	Production Code
		Identifies the party that is to calculate the charges on the bill.

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

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 Customer	**Calculates**			**Billing Party REF*BLT**	**Calc. Party REF*PC**
	LDC Portion	**ESP Portion**			
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=Billed 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:	One Monthly Billed Summary PTD loop is required for every account.
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	PTD*BB

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PTD01	521	**Product Transfer Type Code**	M ID 2/2
			Code identifying the type of product transfer	
			BB Monthly Billed Summary	
			This information is obtained from the billing system to reflect the billing data for this account at the unit of measure level.	

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:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	DTM*150*19990101

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	DTM01	374	Date/Time Qualifier	M ID 3/3
			Code specifying type 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.
	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

Data Element Summary

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

Segment:	**QTY** Quantity (Billed kwh)
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:	Billed KWH
PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	QTY*D1*22348*KH

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity	M	ID 2/2
			D1 Billed		
			Used when Quantity in QTY02 is a "Billed" quantity.		
Must Use	QTY02	380	**Quantity** Numeric value of quantity	X	R 1/15
Must Use	QTY03	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID 2/2
			KH Kilowatt Hour		
			Billed Kilowatt Hours as shown on the customer's bill. May or may not be the same as measured kilowatt hours.		

Segment:	**QTY** Quantity (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:	

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

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	QTY01	673	**Quantity Qualifier**		**M ID 2/2**
			Code specifying the type of quantity		
			D1	Billed	
				Used when Quantity in QTY02 is a "Billed" quantity.	
Must Use	QTY02	380	**Quantity**		**X R 1/15**
			Numeric 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	

Segment:	**QTY** Quantity (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 **Note:** BGE does not store Measured Demand. They will send Billed Demand in this field.
Example:	QTY*QD*14*K1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity	**M ID 2/2**

KA	Estimated Quantity Delivered Used when the quantity delivered is an estimated quantity.	
QD	Actual Quantity Delivered Used when the quantity delivered is an actual quantity.	

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY02	380	**Quantity** Numeric value of quantity	**X R 1/15**
Must Use	QTY03	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	**M ID 2/2**

K1	Kilowatt Demand	

Segment:	**PTD** Product Transfer and Resale Detail (SU=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:	Required if this is a metered account that measures kWh or KVARH and the LDC reads the meter.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	PTD*SU

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PTD01	521	**Product Transfer Type Code**	M ID 2/2
			Code identifying the type of product transfer	
			SU Summary	
			A summary loop will be provided for each type of consumption for every unit of measure for all 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.
	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 if account has metered services.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	DTM*150*19990101

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	**DTM01**	**374**	**Date/Time Qualifier**		M ID 3/3
			Code specifying type 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.
	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 if account has metered services.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	DTM*151*19990131

Data Element Summary

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

Segment:	**QTY** Quantity
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:	Required if account has metered services
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	QTY*QD*22348*KH

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Must Use	QTY01	673	**Quantity Qualifier**		M	ID 2/2
			Code specifying the type of quantity			
			KA	Estimated Quantity Delivered		
				Used when the quantity delivered is an estimated quantity.		
			QD	Actual Quantity Delivered		
				Used when the quantity delivered is an actual quantity.		
			87	Actual Quantity Received (Net Metering)		
				Used when the net generation quantity received is actual.		
			9H	Estimated Quantity Received (Net Metering)		
				Used when the net generation quantity received is estimated.		
Must Use	QTY02	380	**Quantity**		X	R 1/15
			Numeric 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			
			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 (PM=Metered Services Detail)
Position:	010
Loop:	PTD
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	1 If either PTD02 or PTD03 is present, then the other is required.
	2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	

Notes:	PTD Loops may be sent in any order. There will be a separate PTD loop for each unit of measurement for each meter on the account. **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this loop may be sent for each unit of measure, but not each meter. When the BPT04="X4", the data may be summarized for the account.
PA Use:	Required if this is a metered account. **Note:** The sending of the PM loop s is optional when this is a cancel transaction (BPT01=01).
NJ Use:	Required if this is a metered account.
DE Use:	Same as PA
MD Use:	Same as PA
Example:	PTD*PM

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PTD01	521	**Product Transfer Type Code**	M ID 2/2
			Code identifying the type of product transfer	
		PM	Physical 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.
	2 If DTM04 is present, then DTM03 is required.
	3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	This date reflects the beginning of the date range for this meter for this billing period.
	This specific PTD loop is required if there are metered services on the account.
PA Use:	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

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier**	**M**	**ID 3/3**
			Code specifying type 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.
	2 If DTM04 is present, then DTM03 is required.
	3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	

Notes:	This date reflects the end of the date range for this meter for this billing period.
	This specific PTD loop is required if there are metered services on the account.
PA Use:	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

Data Element Summary

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

Segment:	**DTM** Date/Time Reference (514=Meter Exchange Date)	
Position:	020	
Loop:	PTD	
Level:	Detail	
Usage:	Optional	
Max Use:	10	
Purpose:	To specify pertinent dates and times	
Syntax Notes:	**1** At least one of DTM02 DTM03 or DTM05 is required.	
	2 If DTM04 is present, then DTM03 is required.	
	3 If either DTM05 or DTM06 is present, then the other is required.	
Semantic Notes:		
Comments:		

Notes:	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.
PA Use:	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

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier**	**M**	**ID 3/3**
			Code specifying type of date or time, or both date and time		
			514 Transferred		
			Exchanged meter read date		
Must Use	**DTM02**	**373**	**Date**	**X**	**DT 8/8**
			Date expressed as CCYYMMDD		

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

Position:	030
Loop:	PTD
Level:	Detail
Usage:	Optional
Max Use:	20
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
	2 If either C04003 or C04004 is present, then the other is required.
	3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
PA Use:	Required 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. **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*MG*2222277S

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**REF01**	**128**	**Reference Identification Qualifier**	**M**	**ID 2/3**
			Code qualifying the Reference Identification		
			MG Meter Number		
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		

Segment:	**REF** Reference Identification (NH=LDC Rate Class)
Position:	030
Loop:	PTD
Level:	Detail
Usage:	Optional
Max Use:	20
Purpose:	To specify identifying information
Syntax Notes:	**1** At least one of REF02 or REF03 is required.
	2 If either C04003 or C04004 is present, then the other is required.
	3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.
Comments:	

PA Use:	Optional
NJ Use:	Optional
DE Use:	Optional
MD Use:	Optional
Example:	REF*NH*GS1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**REF01**	**128**	**Reference Identification Qualifier**	**M**	**ID 2/3**
			Code qualifying the Reference Identification		
			NH LDC Rate Code		
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		

Segment:	**REF** Reference Identification (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.	
	2 If either C04003 or C04004 is present, then the other is required.	
	3 If either C04005 or C04006 is present, then the other is required.	
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.	
Comments:		
Notes:	This iteration of the REF segment is used for meter level information.	
PA Use:	Conditional: If maintained by utility, must be sent for each meter loop that is used for billing purposes. **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.	
NJ Use:	Optional	
DE Use:	Optional	
MD Use:	Optional	
Example:	REF*PR*123	

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M**	**ID 2/3**
			PR	Price Quote Number	
			LDC Rate Subclass – Used to provide further classification of a rate.		
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X**	**AN 1/30**

Segment:	**REF** Reference Identification (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.
2. If either C04003 or C04004 is present, then the other is required.
3. If either C04005 or C04006 is present, then the other is required.

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

Comments:

PA Use:	Required if consumption is provided at a meter level **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.
NJ Use:	Required if consumption is provided at a meter level **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:	Required if consumption is provided at a meter level **Note:** In Delaware, Co-gen accounts will be handled on a case by case basis, and the usage for them may not be sent via EDI.
MD Use:	Required if consumption is provided at a meter level **Note:** In Maryland, Co-gen accounts will be handled on a case by case basis, and the usage for them may not be sent via EDI.
Example:	REF*JH*A

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	REF01	128	**Reference Identification Qualifier** Code qualifying the Reference Identification	M	ID 2/3

JH   Meter Role

Must Use	REF02	127	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X	AN 1/30

When REF01 is JH, valid values for REF02 are:
- S = Subtractive - 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).

Segment:	**REF** Reference Identification (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.
	2	If either C04003 or C04004 is present, then the other is required.
	3	If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1	REF04 contains data relating to the value cited in REF02.
Comments:		

PA Use:	Required for meters with dials **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Examples:	REF*IX*6.0 REF*IX*5.1 REF*IX*4.2

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M ID 2/3**
		IX	Rate Card Number Number of Dials on the Meter displayed as the number of dials to the left of the decimal, a decimal point, and the number of dials to the right of the decimal.	
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**
Optional	**REF03**	**352**	**Description** A free-form description to clarify the related data elements and their content Optional use: See Meter Type (REF*MT) on 814 Enrollment for valid codes.	**X AN 1/80**

# Dials	Positions to left of decimal	Positions to right of decimal	X12 Example
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 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:	Required if there are metered services on the account.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	QTY*QD*22348*KH
	QTY*QD*14*K1 (If meter measures both, you will have two QTY loops)

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY01	673	**Quantity Qualifier**	M ID 2/2
			Code specifying the type of quantity	

	KA	Estimated Quantity Delivered
		Used when the quantity delivered is an estimated quantity.
	QD	Actual Quantity Delivered
		Used when the quantity delivered is an actual quantity.
	87	Actual Quantity Received (Net Metering)
		Used when the net generation quantity received is actual.
	9H	Estimated Quantity Received (Net Metering)
		Used when the net generation quantity received is estimated.

	Ref. Des.	Data Element	Name	Attributes
Must Use	QTY02	380	**Quantity**	X R 1/15
			Numeric 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 meets or exceeds a defined parameter

K3	Kilovolt Amperes Reactive Hour (kVARH)
	Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
K4	Kilovolt Amperes (KVA)
KH	Kilowatt Hour (kWh)

Segment:	**MEA** Measurements	
Position:	160	
Loop:	QTY	
Level:	Detail	
Usage:	Optional	
Max Use:	40	
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)	
Syntax Notes:	**1**	At least one of MEA03 MEA05 MEA06 or MEA08 is required.
	2	If MEA05 is present, then MEA04 is required.
	3	If MEA06 is present, then MEA04 is required.
	4	If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
	5	Only one of MEA08 or MEA03 may be present.
Semantic Notes:	**1**	MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments:	**1**	When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:	The MEA segment is sent for each QTY loop. The MEA will indicate the "time of use" that applies to the QTY. If meter readings are included in the MEA, they will indicate the "time of use" that the meter readings apply to.
PA Use:	Required (optional on a cancellation)
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
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. Des.	Data Element	Name	Attributes	
Must Use	**MEA01**	**737**	**Measurement Reference ID Code** Code identifying the broad category to which a measurement applies	**O**	**ID 2/2**
			AA	Meter reading-beginning actual/ending actual	
			AE	Meter reading-beginning actual/ending estimated	
			AF	Actual Total	
			BO	Meter Reading as Billed	
				Used when billing charges are based on contractual agreements or pre-established usage and not on actual usage	
			EA	Meter reading-beginning estimated/ending actual	
			EE	Meter reading-beginning estimated/ending estimated	
Must Use	**MEA02**	**738**	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	**O**	**ID 1/3**
			PRQ	Consumption	
Must Use	**MEA03**	**739**	**Measurement Value** The value of the measurement	**X**	**R 1/20**
			Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.		

Must Use	MEA04	355	**Unit or Basis for Measurement Code**	**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
	Represents potential power load measured at predetermined intervals
K2	Kilovolt Amperes Reactive Demand
	Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter
K3	Kilovolt Amperes Reactive Hour
	Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
K4	Kilovolt Amperes (KVA)
K5	Kilovolt Amperes Reactive
KH	Kilowatt Hour

Conditional	MEA05	740	**Range Minimum**	**X**	**R 1/20**

The value specifying the minimum of the measurement range

Beginning reading

Condition for PA: Required for Residential. If the meter provides beginning and ending reads for on and off peak usage, then you must provide beginning and ending reads and consumption. If the meter does not provide beg/ending reads, you only provide consumption.
Condition for MD: Required for residential if printed on the LDC bill.
Condition for NJ: Required for all rate classes if printed on the LDC bill, and this is an actual read. If the meter does not provide begin/ending reads, only consumption will be provided.

Must Use	MEA06	741	**Range Maximum**	**X**	**R 1/20**

The value specifying the maximum of the measurement range

Ending reading or single reading (e.g., demand).

PA: Required for Residential. If the meter provides beginning and ending reads for on and off peak usage, then you must provide beginning and ending reads and consumption. If the meter does not provide beg/ending reads, you only provide consumption.
MD: Required for residential if printed on the LDC bill.

Must Use	MEA07	935	**Measurement Significance Code**	**O**	**ID 2/2**

Code used to benchmark, qualify or further define a measurement value

41	Off Peak
42	On Peak
43	Intermediate
51	Total
	Totalizer
66	Shoulder

Segment:	**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. **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	MEA**MU*2

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	MEA02	738	**Measurement Qualifier**	O	ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies		
			MU Multiplier		
Must Use	MEA03	739	**Measurement Value**	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.
	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 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 ever be sent with Demand (K1). If not present with a demand quantity, it should be assumed to be 1. **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	MEA**ZA*.95

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	MEA02	738	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	O ID 1/3
			ZA Power Factor	
			Relationship between watts and volt - amperes necessary to supply electric load	
Must Use	MEA03	739	**Measurement Value** The value of the measurement	X R 1/20
			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 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 when Transformer Loss is not calculated by the meter. **Note:** If the BPT04="X4" indicating this document is being sent for an interval account at the account level, this segment will be not be used.
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	MEA**CO*1.02

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	MEA02	738	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	O ID 1/3
			CO Transformer Loss Multiplier	
			When a customer owns a transformer and the transformer loss is not measured by the meter.	
Must Use	MEA03	739	**Measurement Value** The value of the measurement	X R 1/20
			Represents the Transformer Loss Multiplier when MEA02 equals "CO".	

Segment:	**PTD** Product Transfer and Resale Detail (BC=Unmetered 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:	Required if there are unmetered services on this account.	
NJ Use:	Same as PA	
DE Use:	Same as PA	
MD Use:	Same as PA	
Example:	PTD*BC	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	PTD01	521	**Product Transfer Type Code** Code identifying the type of product transfer	M ID 2/2
			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:	Required if there are unmetered services on this account
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	DTM*150*19990101

Data Element Summary

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

Segment: **DTM** Date/Time Reference (151=Service Period End)
Position: 020
Loop: PTD
Level: Detail
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.
2 If DTM04 is present, then DTM03 is required.
3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:
Comments:

PA Use:	Required if there are unmetered services on this account
NJ Use:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	DTM*151*19990131

Data Element Summary

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

Segment:	**QTY** Quantity	
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:	This loop is required when there are unmetered services on the account. This will contain the total quantity for the unmetered services.	
PA Use:	Required is there are unmetered services on the account	
NJ Use:	Same as PA	
DE Use:	Same as PA	
MD Use:	Same as PA	
Example:	QTY*QD*500*KH	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY01	673	**Quantity Qualifier** Code specifying the type of quantity	**M**	**ID 2/2**

	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.

	Ref. Des.	Data Element	Name	Attributes	
Must Use	QTY02	380	**Quantity** Numeric value of quantity	**X**	**R 1/15**
Must Use	QTY03	355	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	**M**	**ID 2/2**

	99	Watts
	K1	Kilowatt Demand (kW)
	KH	Kilowatt Hour

Segment:	**SE** Transaction Set Trailer
Position:	030
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:	
Semantic Notes:	
Comments:	1 SE is the last segment of each transaction set.

PA Use:	Required
NJ Use:	Required
DE Use:	Required
MD Use:	Required
Example:	SE*28*000000001

Data Element Summary

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

Examples:

General Note:

For the detail portion, you may send your PTD loops in any order; this is a function of ANSI. The indicator in the PTD loop tells what information is contained in the loop. A translator's mapper will map the loop according to your instructions.

Example 1 – One Meter – On/off peak:

Following example is for an account with one meter. Meter multiplier is 2, Power factor is 1.9999, and no transformer loss. The meter measures on and off peak consumption, and the meter readings are at the on / off peak consumption level. The meter also measures on and off peak demand.

- Total consumption is 100 KWH (60 on peak / 40 off-peak). Demand: On peak 4.7, Off peak 4.1 (billed 4.7).
- This example includes the Summary loop which summarizes kWh (and KVARH, if it existed), and the Monthly Billed Summary for billed kWh, kW (and kvarh if relevant).

BPT*00*REF1-990125*19990125*DD	Meter detail loop
DTM*649*19990202*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is always represented as Eastern prevailing time.
MEA**NP*0.66667	Percent participation. If 100%, no need to send. This example is ESP has 66.667%, LDC 33.333%.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1234567891	LDC Account number
REF*45*9395819001	Old LDC Account number (to be sent for 60 days after a account number change)
REF*11*1394951	ESP Account number
REF*BLT*DUAL	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*100*KH	Monthly billed kWh
QTY*D1*4.7*K1	Monthly derived (billed) demand
QTY*QD*4.7*K1	Monthly measured demand
PTD*SU	Metered services Summary loop
DTM*150*19990101	
DTM*151*19990131	
QTY*QD*100*KH	Calculated summary of all meters for kWh / kvarh only
PTD*PM	Meter detail loop for kWh
DTM*150*19990101	
DTM*151*19990131	
REF*MG*11111111	Meter number
REF*NH*RES	LDC Rate
REF*PR*RESRT	LDC Rate Subclass
REF*JH*A	Additive meter
REF*IX*6.0	Number of dials or digits
QTY*QD*100*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*100*KH*1201*1250*51	Total consumption with begin/end reads
QTY*QD*60*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*60*KH*11001*11030*42	(On peak with consumption and begin/end reads)
QTY*QD*40*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*40*KH*23031*23050*41	(Off peak with consumption and begin/end reads)
PTD*PM	Meter detail loop for kW
DTM*150*19990101	
DTM*151*19990131	

REF*MG*11111111	Meter number
REF*NH*RES	LDC Rate
REF*PR*RESRT	LDC Rate Subclass
REF*JH*A	Additive meter
REF*IX*6.0	Number of dials or digits
QTY*QD*4.7*K1	Demand
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AA*PRQ*4.7*K1***42	On peak demand – readings not required since reset each month
QTY*QD*4.2*K1	Demand
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AA*PRQ*4.2*K1***41	Off peak demand

Example 2 – One Meter - Totalizer

Following example is for an account with one meter. Meter multiplier is 2, Power factor is 1.9999, and no transformer loss. The meter measures on and off peak consumption, and the meter readings are only at the "totalizer" level. The meter also measures on and off peak demand.

- Total consumption is 100 KWH (60 on peak / 40 off-peak). Demand: On peak 4.7, Off peak 4.1 (billed 4.7).
- This example includes the Summary loop which summarizes kWh (and Kvarh, if it existed), and the Monthly Billed Summary for billed kWh, kW (and kvarh if relevant).

BPT*00*REF1-990155*19990131*DD	Meter detail loop
DTM*649*19990202*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	Customer name
REF*12*1234567890	LDC Account number
REF*45*9395819000	Old LDC Account number (to be sent for 60 days after a account number change)
REF*11*1394959	ESP Account number
REF*BLT*DUAL	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*100*KH	Monthly billed kWh
QTY*D1*4.7*K1	Monthly derived demand
QTY*QD*4.7*K1	Monthly measured demand
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*100*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*11111111	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*100*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*100*KH*2500*2550*51	Total consumption, and begin and end readings
QTY*QD*60*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*60*KH***42	(On peak consumption)
QTY*QD*40*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*40*KH***41	(off peak consumption)
PTD*PM	Meter detail loop
DTM*150*19990101	Start period

DTM*151*19990131	End period
REF*MG*11111111	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*4.7*K1	Demand
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AA*PRQ*4.7*K1***42	On peak demand – readings not required since reset each month
QTY*QD*4.2*K1	Demand
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AA*PRQ*4.2*K1***41	Off peak demand)

Example 3 – One Meter – Totalizer Only – No Demand:

Following example is for an account with one meter. Meter multiplier is 1. There is no Power factor and no transformer loss. There is no time of use on the meter. Demand is not measured.
- Total consumption is 600 kWh.
- This example includes the Summary loop which summarizes kWh, and the Monthly Billed Summary for billed kWh.

BPT*00*REF1-990124*19990124*DD	Meter detail loop
DTM*649*19990202*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	Customer name
REF*12*12345678920	LDC Account number
REF*45*93958190020	Old LDC Account number (to be sent for 60 days after a account number change)
REF*11*13949529	ESP Account number
REF*BLT*DUAL	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*600*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*600*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*22222222	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*600*KH	Consumption
MEA*AA*PRQ*600*KH*32000*32600*51	Total consumption, and begin and end readings

Selected Billing Test Scenarios:

Scenario - Single meter totalized (one rate), Month 1
    Consumption is 1234.

BPT*00*REF01-990201*19990201*DD	Meter detail loop

DTM*649*19990202*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*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
REF*BLT*DUAL	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*1234*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*1234*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222222S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*1234*KH	Consumption
MEA*AA*PRQ*1234*KH*32000*33234*51	Total consumption, and begin and end readings

Scenario - Single meter with time of day billing, Month 1

On peak – 724, Off peak 539.

BPT*00*REF04-990201*19990201*DD	Meter detail loop
DTM*649*19990202*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 – ACCT4	Customer name
REF*12*4444444444	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*1263*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*1263*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222233S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*1263*KH	Consumption
MEA*AA*PRQ*1263*KH*10000*11263*51	Total consumption
QTY*QD*724*KH	Consumption
MEA*AA*PRQ*724*KH*32000*32724*42	On peak, and begin and end readings
QTY*QD*539*KH	Consumption
MEA*AA*PRQ*539*KH*15000*15539*41	Off peak, and begin and end readings

Scenario - <u>Single meter totalized. Meter switched by LDC during month 1.</u>
    Meter 1 usage 652, meter 2 usage 235.

BPT*00*REF06-990201*19990201*DD	Meter detail loop
DTM*649*19990202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*887*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*887*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop – Meter 1
DTM*150*19990101	Start period
DTM*514*19990121	End period
REF*MG*2222266S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*652*KH	Consumption – Meter 1
MEA*AA*PRQ*652*KH*20000*20652*51	Total consumption, with begin/end readings– Meter 1
PTD*PM	Meter detail loop – Meter 2
DTM*514*19990122	Start period
DTM*151*19990131	End period
REF*MG*3333366S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*235*KH	Consumption – Meter 2
MEA*AA*PRQ*235*KH*0*235*51	Total consumption, with begin/end readings– meter 2

Scenario - Single meter. , Demand and KWH meter (non-interval), Month 1
   Month 1 information: KW 14, KWH 22,348 (no readings available). Billed demand is 50 per contract.

BPT*00*REF07-990201*19990201*DD	Meter detail loop
DTM*649*19990202*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 – ACCT7	Customer name
REF*12*777777777777	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*22348*KH	Monthly billed kWh
QTY*D1*50*K1	Monthly derived demand
QTY*QD*14*K1	Monthly measured demand
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*22348*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222277S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*22348*KH	Consumption
MEA*AA*PRQ*22348*KH*130000*152348*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222277S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*14*K1	Demand
MEA*AA*PRQ*14*K1***51	Total demand, with begin/end readings

Scenario - Multiple meters. Demand and KWH meter (non-interval).
   Month 1 Meter 1 information: KW 14, KWH 22,348 (no readings available). Billed demand is 50 per contract.
   Meter 2 information: KW 15, KWH 20,000.

BPT*00*REF07-990201*19990201*DD	Meter detail loop
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT8	Customer name
REF*12*888888888888	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*42348*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*42348*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter 1 detail loop
DTM*150*19990101	Start period

DTM*151*19990131	End period
REF*MG*2222277S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*22348*KH	Consumption
MEA*AA*PRQ*22348*KH*130000*152348*51	Total consumption, with begin/end readings
PTD*PM	Meter 1 detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222277S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*14*K1	Demand
MEA*AA*PRQ*14*K1***51	Total demand, with begin/end readings
PTD*PM	Meter 2 detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*1234577S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*20000*KH	Consumption
MEA*AA*PRQ*20000*KH*185000*205000*51	Total consumption, with begin/end readings
PTD*PM	Meter 1 detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*1234577S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*15*K1	Demand
MEA*AA*PRQ*15*K1***51	Total demand, with begin/end readings

Scenario - <u>Multiple</u> <u>services</u>, <u>metered</u> <u>and</u> <u>unmetered</u>.
Metered consumption is 763, unmetered is 48.

BPT*00*REF09-990201*19990201*DD	Meter detail loop
DTM*649*19990202*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 – ACCT9	Customer name
REF*12*99999999999	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*811*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*763*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222299S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*763*KH	Consumption
MEA*AA*PRQ*763*KH*12000*12763*51	Total consumption, with begin/end readings
PTD*BC	Unmetered Services Summary
DTM*150*19990101	Start period
DTM*151*19990131	End period

QTY*QD*48*KH	Unmetered consumption

Scenario - Unmetered Service alone.

Unmetered consumption is 97.

BPT*00*REF10-990201*19990201*DD	Meter detail loop
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT10	Customer name
REF*12*100000000	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*97*KH	Monthly billed kWh
PTD*BC	Unmetered Services Summary
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*97*KH	Unmetered consumption

Scenario - Single meter totalized (one rate), month 2

Consumption is 867.

BPT*00*REF01-990301*19990301*DD	Meter detail loop
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
REF*BLT*DUAL	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*19990201	Start period
DTM*151*19990228	End period
QTY*D1*867*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990201	Start period
DTM*151*19990228	End period
QTY*QD*867*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990201	Start period
DTM*151*19990228	End period
REF*MG*2222222S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*867*KH	Consumption
MEA*AA*PRQ*867*KH*33244*34111*51	Total consumption, and begin and end readings

Scenario - Cancel Months 1 and 2.

Separate documents must be sent for each month.

BPT*01*REF01-990310A*19990310*DD*****REF01-090201	Meter detail loop
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
REF*BLT*DUAL	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*1234*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*1234*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222222S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*1234*KH	Consumption
MEA*AA*PRQ*1234*KH*32000*33234*51	Total consumption, and begin and end readings (not all LDCs can provide MEA on a cancel)

BPT*01*REF01-990310B*19990301*DD*****REF01-990301	Meter detail loop
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*12*1	LDC Account number
REF*11*1394959	ESP Account number
REF*BLT*DUAL	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*19990201	Start period
DTM*151*19990228	End period
QTY*D1*867*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990201	Start period
DTM*151*19990228	End period
QTY*QD*867*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990201	Start period
DTM*151*19990228	End period
REF*MG*2222222S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*867*KH	Consumption
MEA*AA*PRQ*867*KH*33234*34101*51	Total consumption, and begin and end readings (not all LDCs can provide MEA on a cancel)

Scenario - Restatement of usage for Months 1 and 2.

Total usage for 2 months is 2043.

BPT*00*REF01-990310C*19990310*DD	Meter detail loop
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT1	Customer name
REF*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
REF*BLT*DUAL	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*19990101	Start period
DTM*151*19990228	End period
QTY*D1*2043*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990228	End period
QTY*QD*2043*KH	Calculated summary of all metered for kWh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990228	End period
REF*MG*2222222S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*2043*KH	Consumption
MEA*AA*PRQ*2043*KH***51	Total consumption, and readings not known

Scenario - FINAL during month 2.

Single meter with time of day billing. Month 2 – On peak – 189, Off peak 67.

BPT*00*REF04-990301*19990301*DD***F	Meter detail loop
DTM*649*19990202*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 – ACCT4	Customer name
REF*12*4444444444	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*19990201	Start period
DTM*151*19990224	End period
QTY*D1*256*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*19990201	Start period
DTM*151*19990224	End period
QTY*QD*256*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990201	Start period
DTM*151*19990224	End period
REF*MG*2222233S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*256*KH	Consumption
MEA*AA*PRQ*256*KH*20100*20356*51	Total consumption
QTY*QD*189*KH	Consumption
MEA*AA*PRQ*189*KH*32724*32913*42	On peak, and begin and end readings
QTY*QD*67*KH	Consumption
MEA*AA*PRQ*67*KH*15539*15606*41	Off peak, and begin and end readings

Scenario - <u>Single meter. Demand and KWH meter (non-interval), Month 1:</u>

KW 14, KWH 22,348 (no readings available – non-residential account). Percent participation: ESP has .6667, LDC has .3333

BPT*00*REF07-990201*19990201*DD	Meter detail loop
DTM*649*19990202*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is always represented as Eastern prevailing time.
MEA**NP*0.66667	Percent participation. This example is ESP has 66.667%, LDC 33.333%.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME – ACCT17	Customer name
REF*12*17	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*22348*KH	Monthly billed kWh
QTY*D1*14*K1	Monthly derived demand
QTY*QD*14*K1	Monthly measured demand
PTD*SU	Metered services Summary loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
QTY*QD*22348*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222277S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*22348*KH	Consumption
MEA*AA*PRQ*22348*KH***51	Consumption
PTD*PM	Meter detail loop
DTM*150*19990101	Start period
DTM*151*19990131	End period
REF*MG*2222277S	
REF*JH*A	
REF*IX*6.0	Number of dials or digits
QTY*QD*14*K1	Consumption
MEA*AA*PRQ*14*K1***51	Total consumption, with begin/end readings

<u>RENEWABLE ENERGY PROVIDER Example – New Jersey</u>

<u>Scenario:</u> This example is to illustrate the use of the N1*G7 for the Renewable Energy Provider. All other segments would be the same as they are for an ESP.

BPT*00*REF1-990125*19990125*DD	Meter detail loop
DTM*649*19990202*1700	This is only required on Bill Ready Consolidated Billing scenarios. Time is always represented as Eastern prevailing time.
MEA**NP*0.66667	Percent participation. If 100%, no need to send. This example is ESP has 66.667%, LDC 33.333%.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*RENEWABLE COMPANY*9*007909422ESP1	Renewable Energy Provider Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1234567891	LDC Account number
REF*11*1394951	Renewable Energy Provider Account number

Pennsylvania Net Metering / Customer Generation Examples

Net Meter / Customer Generation Scenario 1A: Consumption greater than generation

Single meter reporting both in and out flow KH.
Customer consumed 1000KH and generated 200KH.   The billed KH in the BB loop is 800KH.
The net consumption in the SU loop is 800KH. The PM is looped, one for the consumption KH (1000KH)
and another for the generation KH (200) both with same meter number.

BPT*00*REF06-120201*20120201*DD	Meter detail loop
DTM*649*20120202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*800*KH	Monthly billed KH
PTD*SU	Metered services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*QD*800*KH	Calculated summary of all metered for KH / kvarh only
PTD*PM	Meter detail loop – **Consumption Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*11111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*1000*KH	**Consumption**
MEA*AA*PRQ*1000*KH*20000*21000*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop – **Generation Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*11111111	Meter Number
REF*JH*S	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*200*KH	**Actual Generation**
MEA*AA*PRQ*200*KH*300*500*51	Total generation, with begin/end readings

Net Meter / Customer Generation Scenario 1B: Generation greater than consumption

Single meter reporting both in and out flow KH.

Customer generated 1300KH and consumed 1000KH.

The billed KH in the BB loop is zero. The net generation reported in the SU loop is 300KH. The PM is looped, one for the consumption KH (1000KH) and another for the generation KH (1300) both with same meter number.

BPT*00*REF06-120201*20120201*DD	Meter detail loop
DTM*649*20120202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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 KH
PTD*SU	Metered services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*87*300*KH	Calculated net KH
PTD*PM	Meter detail loop – **Consumption Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*11111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*1000*KH	**Consumption**
MEA*AA*PRQ*1000*KH*20000*21000*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop – **Generation Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*11111111	Meter Number
REF*JH*S	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*1300*KH	**Actual Generation**
MEA*AA*PRQ*1300*KH*300*1600*51	Total generation, with begin/end readings

Net Meter / Customer Generation Scenario 2A: Consumption greater than generation

Single meter reporting net KH.   Customer consumed 1000KH and generated 200KH.   The billed KH in the BB loop is 800KH. The net generation is reported in both the SU and PM loops is 800KH.   This method his does NOT report the customer's actual consumption; only the net generation is being reported.

BPT*00*REF06-120201*20120201*DD	Meter detail loop
DTM*649*20120202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*800*KH	Monthly billed KH
PTD*SU	Metered services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*QD*800*KH	Calculated summary of all metered for KH / kvarh only
PTD*PM	Meter detail loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*11111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*800*KH	**Consumption**
MEA*AA*PRQ*800*KH*20000*20800*51	Total consumption, with begin/end readings

Net Meter / Customer Generation Scenario 2B: Generation greater than consumption

Single meter reporting net KH.   Customer generated 650KH and consumed 500KH.
The billed KH in the BB loop is zero. The net generation is reported in both the SU and PM loops is 150KH. This method his does NOT report the customer's actual consumption; only the net generation is being reported.

BPT*00*REF06-120201*20120201*DD	Meter detail loop
DTM*649*20120202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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 KH
PTD*SU	Metered services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*87*150*KH	Net generation, the meter is only reporting the net
PTD*PM	Meter detail loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*11111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*150*KH	**Actual Generation**
MEA*AA*PRQ*150*KH*20000*20150*51	Net generation, with begin/end readings

Net Meter / Customer Generation Scenario 3A: Consumption greater than generation

>   Separate meters, one reporting inflow and another meter reporting outflow KH.
>   Customer consumed 1000KH and generated 600KH.   The net consumption in the SU loop is 400KH.
>   The billed KH in the BB loop is 400KH.

BPT*00*REF06-120201*20120201*DD	Meter detail loop
DTM*649*20120202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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*400*KH	Monthly billed KH
PTD*SU	Metered services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*QD*400*KH	Calculated summary of all metered for KH / kvarh only
PTD*PM	Meter detail loop – **Consumption Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*2222266S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*1000*KH	**Consumption**
MEA*AA*PRQ*1000*KH*20000*21000*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop – **Generation Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*3333366S	Meter Number
REF*JH*S	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*600*KH	**Actual Generation**
MEA*AA*PRQ*600*KH*300*900*51	Total generation, with begin/end readings

Net Meter / Customer Generation Scenario 3B: Generation greater than consumption

Separate meters, one reporting inflow and another meter reporting outflow KH.

Customer generated 600KH and consumed 400KH.   The net generation reported in the SU loop is 200KH.

The billed KH in the BB loop is zero.

BPT*00*REF06-120201*20120201*DD	Meter detail loop
DTM*649*20120202*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 – ACCT6	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*DUAL	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 KH
PTD*SU	Metered services Summary loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
QTY*87*200*KH	Calculated summary of all metered for KH / kvarh only
PTD*PM	Meter detail loop – **Consumption Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*2222266S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*400*KH	**Consumption**
MEA*AA*PRQ*400*KH*20000*20400*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop – **Generation Meter**
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*3333366S	Meter Number
REF*JH*S	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*600*KH	**Actual Generation**
MEA*AA*PRQ*600*KH*300*900*51	Total generation, with begin/end readings