Pennsylvania New Jersey Delaware Maryland

Implementation Guideline

Electronic Data Interchange

TRANSACTION SET

867 Monthly Usage Ver/Rel 004010

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	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) 					
March 17, 2014 Version 6.1	 Incorporate PA Change Control 105 Update2 (clarify net meter bank rollover) Incorporate PA Change Control 111 (clarify PECO use of BPT04) Incorporate PA Change Control 116 (update DLCO net meter looping) Incorporate MD Change Control 018 (clarify multiple meter exchanges) Incorporate MD Change Control 025 (867MU changes in PHI new CIS) Incorporate MD Change Control 028 (BGE support interval usage via EDI) Incorporate NJ Change Control 029 (uniform net meter data reporting) Incorporate NJ Change Control Electric 016 (uniform net meter data reporting) Incorporate NJ Change Control Electric 020 (ACE new CIS; 867MU changes) Incorporate NJ Change Control Electric 031 (RECO removal from IG) 					
February 18, 2015 Version 6.2	• Incorporate MD Change Control 036 (clarify net meter customer excess generation)					

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	l 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.

<u>Metered Services Information</u> (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.

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

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: 1. GPM – Green Power Marketer (New Jersey)
Cross Reference Number between 867, 810, and 820	 Note: The transaction will either have an ESP or a Renewable Energy Provider, but not both. 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

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 - If account-level interval detail is requested, will provide using 867IU with BB, SU, and BO loops. If meter-level interval detail is requested, will provide using BB, BO, and PM loops. Else, will provide an 867MU with BB, SU, and PM loops (BPT04 in 867MU will be "DD" for AMR monthly metered accounts and "X5" for interval metered accounts). PPL EU – Will provide detail interval data using 867IU with BB, SU, and BO loops. • If summary level is requested, will provide an 867MU with BB and SU loops (BPT04 will be "DD") UGI - No interval customers. BB (Billed Summary) Loop –reports the monthly billed summary usage for net • metered customers. **Requirements for** When customer's consumption is greater than generation, the billed KH usage in the 1. uniform support of Net QTY02 will be reported as net KH (generation subtracted from total **Metered Customers:** consumption). 2. When customer's generation is greater than consumption, the billed usage in the QTY02 will be reported as 0 (zero) KH. In either scenario, the QTY02 will never be signed negative. 3. SU (Metered Services Summary) Loop -reports the summary usage for net metered customers. When the customer's consumption is greater than generation, the KH will be reported 1
 - as net consumption (OTY01 w/actual = OD or estimated = KA) with the total generation subtracted from total consumption.
 - When the customer's generation is greater than consumption, the KH will be reported 2. 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.

What document is sent if supplier elects NOT to receive detail interval data?

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 and PPL (MV90 only).
 - 1. The meter number will be identical for each loop.
 - 2. 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).
 - 3. 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).
 - 4. The QTY02 will never be signed negative
 - 5. 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 (non-MV90) and Duquesne Light
 - 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). The meter role (REF*JH) will be 'A' (additive).
 - 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).
 - 3. 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.
 - 1. The meter number should be unique for each KH loop. The meter attributes for each KH loop may have different values.
 - 2. 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).
 - 3. 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).
 - 4. The QTY02 will never be signed negative.

Applies to FirstEnergy companies, PPLEU, Duquesne and UGI (PECO does NOT bank excess customer generation)

The LDC will apply excess generation KH from a prior month(s) into the billed quantity (D1) segment of the billed summary (BB) loop of the 867MU/IU transaction sets. This process reduces the billed consumption which effectively 'forces' a supplier invoicing off the BB loop to 'credit' customer excess generation from a prior month(s). When this occurs, the sum of the metered services (PM) loops will not equal the KH being reporting in the BB loop. Suppliers should understand this practice and examine current billing processes for net metered customers. In most cases, the customer's actual consumption and generation is made available in the PM (meter) loops of the 867MU/IU.

For settlement purposes, each of the LDCs applying the banked KH adjustment reports the net KH to PJM or zero KH if net negative on a monthly basis.

Banked KH adjustment for excess customer generation:

New Jersey Notes

Rockland Electric Company	Rockland Electric Company (RECO) does not utilize this EDI implementation guideline. RECO uses the New York EDI implementation guidelines.		
What document is sent if supplier elects NOT to receive detail interval data?	 The standard method for interval accounts is to always pass interval data. JCP&L – JCP&L will allow the summary option under the same guidelines they use in PA. JCP&L will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and PM loops (BPT04 will be "X5"). Atlantic City Electric will allow a summary option. Atlantic City Electric will provide detail interval data using 867IU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and BQ loops. If summary level is requested, will provide an 867MU with BB, SU, and BQ loops. (BPT04 will be "X5") 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 Information:	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 watthour meter which goes both ways ultimately provides 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.		

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Data Requirements for uniform support of Net Metered Customers: NJ EDI Change Control Electric 016 mandates specific data requirements in support of net metered customers. Implementation by utility as follows...

- Atlantic City Electric with new CIS (est. early 2015)
- o JCP&L 4Q 2014 (867MU/HU) and 1Q 2015 (867IU)
- PSE&G currently supported, see below for additional PSE&G notes
- 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.
- 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 Atlantic City Electric and PSE&G (Note: PSE&G sends one PM loop with separate QTY segments reporting generation and consumption)
 - a. The meter number will be identical for each loop. (Note: PSE&G sends one PM 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). (PSE&G sends meter role of 'A')
 - 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). (N/A to PSE&G)
 - 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. (PSE&G sends one PM loop)
 - 2. Single meter reporting only the net consumption, one PM loop for KH. (Used by JCP&L and Atlantic City Electric)
 - 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.

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Data Requirements for uniform support of Net Metered Customers (Continued):

- 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.
 - 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.

Maryland Notes

If a supplier elects to receive only summary level information for an interval account, they will receive an 867MU document.

With PHI new CIS, the 'SI' process will be supported by ALL interval metered accounts, not just those with smart meters.

Note: BGE – The default is that an ESP will receive interval data at the summary level only (BPT04 = DD)

- 1. If an ESP wants to receive interval data at the detail level for AMI/Smart metered accounts, the ESP must submit "SI" in the LIN05 and "DETAIL" in the REF17.
- 2. The ESP may request detail level interval data post enrollment by submitting a Change Request at a later date.
- 3. For non-AMI/Smart metered interval accounts, the ESP will receive 867MU with the detail interval data posted to BGE's website.

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

- Delmarva & PEPCO Supplier will receive 867IU for all accounts (unless supplier has requested summary data. If the supplier elects NOT to receive detail interval data, PHI will send EDI 867MU (BB/SU/PM/BC loops) with BPT04 = 'X5' for accounts the supplier requested summary interval usage. BG&E For AMI/Smart metered accounts, will provide 867IU if requested as stated above. For non-AMI/Smart metered accounts, no 867IU will be sent. Interval data will be provided on web; however, an 867MU will be provided for the 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").

If the event the utility experiences multiple meter exchanges during the same service period, the following format applies.

867MU - PTD*PM Loop - Position 020

DTM*150*20130114 – Service Period Start DTM*514*20130117 – First Meter Exchange on 1/17/2013 DTM*514*20130117 DTM*514*20130119 – Second Meter Exchange on 1/19/2013 DTM*514*20130119 DTM*151*20130213 – Service Period End

Looping of DTM segments in the PM (meter) loop when multiple meter exchanges occur during the same service period

What document is sent if supplier elects NOT

to receive detail interval data?

Requirements for uniform support of Net **Metered Customers:**

Sample provided in the back of this implementation guideline.

- 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.
- In either scenario, the QTY02 will never be signed negative. 3.
- SU (Metered Services Summary) Loop -reports the summary usage for net metered customers.
- When the customer's consumption is greater than generation, the KH will be reported 1. 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).
- In either scenario, the QTY02 will never be signed negative. 3.
- 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:
- Single meter reporting both in and out flow. The PM loop for KH will be repeated, 1. one reporting consumption and one reporting generation. (BGE, Delmarva, PEPCO)
 - 1. The meter number will be identical for each loop.
 - 2. 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).
 - In the generation loop, the meter role (REF*JH) will be 'S' (subtractive) 3. and the KH usage will be reported as net generation delivered (actual = 87or estimated = 9H).
 - The OTY02 will never be signed negative 4.
 - Being this is a single meter, the meter attributes will remain the same for 5. both PM loops.
- 2. Single meter reporting only the net consumption, one PM loop for KH. (Potomac Edison)
 - 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). The meter role (REF*JH) will be 'A' (additive).
 - 2. 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). 3.
 - The OTY02 will never be signed negative.
- Separate meters, one reporting inflow and another meter reporting outflow. The PM 3. loop will be repeated for KH, one meter reporting consumption and one meter reporting generation.
 - The meter number should be unique for each KH loop. The meter 1. attributes for each KH loop may have different values.
 - In the consumption loop, the meter role (REF*JH) will be 'A' (additive) 2. and the KH usage will be reported in quantity delivered (actual = QD or estimated = KA).
 - In the generation loop, the meter role (REF*JH) will be 'S' (subtractive) 3. and the KH usage will be reported as net generation delivered (actual = 87 or estimated = 9H).
 - 4. The QTY02 will never be signed negative.

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Net Metering – Excess Customer Generation	Maryland legislation PUA 7-306 states the Electric Company, not the Electricity Supplier, must pay the customer for accrued net excess generation on an annual basis (April meter read). Furthermore the rule states "For customers served by an electricity supplier, the dollar value of the net excess generation shall be equal to the generation or commodity rate that the customer would have been charged by the electricity supplier multiplied by the number of kilowatt–hours of net excess generation." To support this requirement, each LDC maintains customer generation balance and for any excess generation during the annual true-up, the customer is credited based on their LDC or EGS rate.
Net Metering – banked KH adjustment for excess customer generation	 Applies to Potomac Edison, BG&E, Delmarva MD and PEPCO MD The LDC will apply excess generation KH from a prior month(s) into the billed quantity (D1) segment of the billed summary (BB) loop of the 867MU/IU transaction sets reducing billed consumption. When this occurs, the sum of the metered services (PM) loops will not equal the KH being reporting in the BB loop. In the event the banked KH is not exhausted it will carry over to the following month. In conjunction with Maryland excess generation rules, the EGS should understand this banked rollover practice and examine current billing processes for net metered customers. For settlement purposes, each of the LDCs applying the banked KH adjustment reports the net KH to PJM or zero KH if net negative on a monthly basis. Example of banked KH adjustment Month 1 – Customer consumes 200KH and generates 500KH, net is excess generation of 300KH. The utility sends 0KH in BB loop. Supplier would bill customer 0 KH and is settled on 0 KH at PJM. Month 2 – Customer consumes 500KH and generates 150KH, net is consumption of 350KH. The utility rolls banked excess of 300KH from prior month and applies to current month bill. Utility and supplier bill customer for 50KH (350KH – 300KH) and the same 50KH is settled at PJM for Month 2. For settlement purposes, each of the LDCs applying the banked KH adjustment reports the net KH to PJM or zero KH if net negative on a monthly basis.

How to Use the Impementation Guideline

Segment: Position: Loop: Level: Usage: Max Use: Purpose: Syntax Notes: Semantic Notes: Comments: Notes: PA Use:	REF Reference Identification 030 LIN Detail Optional >1 To specify identifying information 1 At least one of REF02 or REF03 is require 2 If either C04003 or C04004 is present, then 3 If either C04005 or C04006 is present, then 1 REF04 contains data relating to the value of Recommended by UIG 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.	n the other is required. for State Rules.
NJ Use: Example:	Request:RequiredAccept Response:RequiredReject Response:RequiredSame as PAREF*12*2931839200	This section is used to show the individual State's Rules for implementation of this segment.
Ref. <u>Des.</u> Must Use REF01	Data Element Summary Data Element Name 128 Reference Identification Qualifier Code qualifying the Reference Identification 12 Billing Account	X12 Attributes M ID 2/3
Must Use REF02 This column shows th use of each data element. If state rules differ, this will show "Conditional" and the conditions will be explained in the appropriate grayboxe	LDC ssigned a 127 Reference Identificatio Reference information as de Identification Qualifier for a particul the second sec	Account number for end use customer. X AN 1/30 lar Transaction Set or as specified by the reference 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**

Pos. Seg. Req. Loop Notes and <u>ID</u> Des. Max.Use <u>Repeat</u> **Comments** No. <u>Name</u> Must Use Transaction Set Header М 010 ST1 Must Use 020 1 BPT Beginning Segment for Product Transfer and М Resale 050 DTM Date/Time Reference 0 10 075 MEA Measurements 0 20 LOOP ID – N1 5 080 N1 Name 0 1 120 REF Reference Identification 0 12

Detail:

Heading:

	Pos. <u>No.</u>	Seg. <u>ID</u>	Name	Req. <u>Des.</u>	<u>Max.Use</u>	Loop <u>Repeat</u>	Notes and <u>Comments</u>
			LOOP ID – PTD			>1	
Must Use	010	PTD	Product Transfer and Resale Detail	М	1		
	020	DTM	Date/Time Reference	0	10		
	030	REF	Reference Identification	0	20		
			LOOP ID – QTY			>1	
	110	QTY	Quantity	0	1		
	160	MEA	Measurements	0	40		

Summary:

	Pos.	Seg.		Req.		Loop	Notes and
	<u>No.</u>	ID	<u>Name</u>	Des.	Max.Use	Repeat	Comments
Must Use	030	SE	Transaction Set Trailer	М	1		

Appl Field	Field Name	Description	EDI Segment	Related EDI Qualifier	Data Type
Header	r 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 (CCYYMMD D) and DTM03(HH MM)	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).9999 9
9	LDC Name	LDC's Name	N102	N1: N101 = 8S	X(60)
10	LDC Duns	LDC's DUNS Number or DUNS+4 Number	N104	N1: N101 = 8S N103 = 1 or 9	X(13)
11	ESP Name	ESP's Name	N102	N1: N101 = SJ	X(60)
12	ESP Duns	ESP's DUNS Number or DUNS+4 Number	N104	N1: N101 = SJ N103 = 1 or 9	X(13)
	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 = $G7$	X(13)	
13	Customer Name	Customer Name	N102	N103 = 1 or 9 N1: N101 = 8R	X(60)	
14		LDC Customer Account Number	REF02	N1: N101*8R Loop	X(30)	
14.2	LDC Account Number - unmetered	LDC Customer Account Number – REF03 N Unmetered R		REF01 = 12 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				
17	Billing Type	Indicates type of billing - LDC consolidated Billing (REF02=LDC) - ESP consolidated Billing (REF02=ESP) - Dual bills (REF02=DUAL)	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 con	nbinations.			
		Billed Summary - Loop Required if the LDC				
This in	formation is obtained from	om the billing system to reflect billing data for the	his account at	the unit of mea	sure level	
				the unit of mea		
19	Product Transfer Type	Monthly Billed Summary	PTD01= BB		X(2)	
19 20	Product Transfer Type Service Period Begin Date	Monthly Billed Summary Start date of the period for which the readings are provided	PTD01= BB DTM02	DTM01 = 150	X(2) 9(8)	
19 20 21	Product Transfer Type Service Period Begin Date Service Period End Date	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided	PTD01= BB DTM02 DTM02		X(2) 9(8) 9(8)	
19 20 21 22	Product Transfer Type Service Period Begin Date Service Period End Date Quantity Qualifier	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided Represents that the quantity was billed: D1 - Billed	PTD01= BB DTM02 DTM02 QTY01	DTM01 = 150 DTM01 = 151	X(2) 9(8)	
19 20 21	Product Transfer Type Service Period Begin Date Service Period End Date	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided Represents that the quantity was billed:	PTD01= BB DTM02 DTM02	DTM01 = 150	X(2) 9(8) 9(8) X(2)	
19 20 21 22	Product Transfer Type Service Period Begin Date Service Period End Date Quantity Qualifier Quantity Delivered -	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided Represents that the quantity was billed: D1 - Billed This data is taken from the LDC billing system and reflects the KWH amount on which the customer was billed. Indicates unit of measurement for quantity of consumption delivered during service period.	PTD01= BB DTM02 DTM02 QTY01	DTM01 = 150 DTM01 = 151	X(2) 9(8) 9(8) X(2)	
19 20 21 22 23	Product Transfer Type Service Period Begin Date Service Period End Date Quantity Qualifier Quantity Delivered - Billed kWh Quantity Delivered	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided Represents that the quantity was billed: D1 - Billed This data is taken from the LDC billing system and reflects the KWH amount on which the customer was billed. Indicates unit of measurement for quantity of	PTD01= BB DTM02 DTM02 QTY01 QTY02	DTM01 = 150 DTM01 = 151	X(2) 9(8) 9(8) X(2) 9(10).9(4)	
19 20 21 22 23 24	Product Transfer Type Service Period Begin Date Service Period End Date Quantity Qualifier Quantity Delivered - Billed kWh Quantity Delivered Unit of Measurement	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided Represents that the quantity was billed: D1 - Billed This data is taken from the LDC billing system and reflects the KWH amount on which the customer was billed. Indicates unit of measurement for quantity of consumption delivered during service period. KH - Kilowatt Hours Represents that the quantity was billed:	PTD01= BB DTM02 DTM02 QTY01 QTY02 QTY03 QTY01 QTY02	DTM01 = 150 DTM01 = 151	X(2) 9(8) 9(8) X(2) - 9(10).9(4) X(2)	
19 20 21 22 23 24 25	Product Transfer Type Service Period Begin Date Service Period End Date Quantity Qualifier Quantity Delivered - Billed kWh Quantity Delivered Unit of Measurement Quantity Qualifier Quantity Delivered - Derived or Billed	Monthly Billed Summary Start date of the period for which the readings are provided End date of the period for which the readings are provided Represents that the quantity was billed: D1 - Billed This data is taken from the LDC billing system and reflects the KWH amount on which the customer was billed. Indicates unit of measurement for quantity of consumption delivered during service period. KH - Kilowatt Hours Represents that the quantity was billed: D1 - Billed 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	PTD01= BB DTM02 DTM02 QTY01 QTY02 QTY03 QTY01 QTY02	DTM01 = 150 DTM01 = 151 QTY01	X(2) 9(8) 9(8) X(2) 9(10).9(4)) X(2) X(2) -	

29	Quantity Delivered -	Reflects what the meter actual shows	QTY02	QTY01	-
	Measured or	(including all factors except Power Factor)			9(10).9(4
	Registered Demand	and is provided at the account level only.)
30	Quantity Delivered	Indicates unit of measurement for quantity of	QTY03		X(2)
	Unit of Measurement	consumption delivered during service period.			
		K1 - Demand (KW)			
		Summary - Loop required if there are meter		n the account	
31	Product Transfer Type	Metered Services Summary	PTD01= SU		X(2)
32	Service Period Begin	Start date of the period for which the readings	DTM02	DTM01 = 150	9(8)
	Date	are provided			
33	Service Period End	End date of the period for which the readings	DTM02	DTM01 = 151	9(8)
	Date	are provided			
34	Quantity Qualifier	Represents whether the quantity is actual or	QTY01		X(2)
		estimated:			
		KA = Estimated Quantity Delivered			
		QD = Actual Quantity Delivered			
		87 = Actual Quantity Received (Net Meter)			
		9H = Estimated Quantity Received (Net			
35	Quantity Delivered	Represents quantity of consumption delivered	QTY02	QTY01	-
		for service period. Contains the difference in			9(10).9(4
		the meter readings multiplied by various)
		factors, excluding Power Factor.			
36	Quantity Delivered	Indicates unit of measurement for quantity of	QTY03		X(2)
	Unit of Measurement	consumption delivered during service period.			
		Only valid for KWH and KVARH.			
		s Detail - Loop Required if there are metered		the account	Ŧ
37		Metered Services Detail	PTD01= PM		X(2)
38	Service Period Begin	1	DTM02	DTM01 = 150	9(8)
•	Date	the changed in meter.	5 5 6 6		0.(0)
39	Service Period End	End date of the service period or end date of	DTM02	DTM01 = 151	9(8)
	Date	the changed out meter.			
40	Meter Change Out	Used in conjunction with either the Service	DTM02	DTM01 = 514	X(12)
	Date	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.			
41	Meter Number	Serial number of this specific meter (may	REF02	REF01 = MG	X(30)
		have multiple meters)			
42	LDC Rate Code	Code indicating the rate a customer is being	REF02	$REF01 = \mathbf{NH}$	X(30)
		charged by LDC per tariff. Codes posted on			
		LDC's Web site			
43	LDC Rate Subclass	Used to provide further classification of a rate.	REF02	REF01= PR	X(30)
	Code	_			
44	Meter Role	Effect of consumption on summarized total.	REF02	REF01 = JH	X(30)
•	1	$\mathbf{S} = $ Subtractive (consumption subtracted from			l `´´
		· · · · ·	1		
		summarized total).			
		summarized total). A = Additive (consumption contributed to			
		summarized total). A = Additive (consumption contributed to summarized total - do nothing).			
		$\mathbf{A} = \mathbf{A}\mathbf{d}\mathbf{d}\mathbf{i}\mathbf{t}\mathbf{i}\mathbf{v}\mathbf{e}$ (consumption contributed to			

45	Number of Dials /	Needed to determine usage if meter reading	REF02	REF01 = IX	9.9
	Digits and related decimal positions	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.			
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 RTY02 QTY01QTY01		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	$MEA02 = \mathbf{Z}\mathbf{A}$	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)
		Summary - Loop required if there are unmet			nt
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)

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62	Quantity Delivered	Represents quantity of consumption delivered for service period.	QTY02	QTY01	9(10).9(4)
6.		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*00000001

Must Use	Ref. <u>Des.</u> ST01	Data <u>Element</u> 143		Set Identifier Code lentifying a Transaction Set	<u>Attı</u> M	<u>ributes</u> ID 3/3
			867	Product Transfer and Resale Report		
Must Use	ST02	329	Transaction Set Control NumberMIdentifying control number that must be unique within the transaction set function by the originator for a transaction set		AN 4/9 nal group assigned	

Segment:	BPT Beginning Segment for Product Transfer and Resale					
U						
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

Must Use	Ref. <u>Des.</u> BPT01	Data <u>Element</u> 353	<u>Name</u> Transaction Set Pu Code identifying purpose		Attributes M ID 2/2
			00	Original	
				Conveys original readings for the acco	unt being reported.
			01	Cancellation	
				Indicates that the readings previously r account are to be ignored.	eported for the
Must Use	BPT02	127	Reference Identific Reference information as Identification Qualifier	ation defined for a particular Transaction Set or as spec	O AN 1/30 cified by the Reference
			transaction. This nu PA: This code will b	n identification number assigned by the output over time. The used as a cross reference to the 810 b the sthat make the other party whole, it will 0.	illing document,
Must Use	BPT03	373	Date Date (CCYYMMDD)		M DT 8/8
			Transaction Creation application system.	n Date – the date that the data is process	ed by the
Must Use	BPT04	755	Report Type Code Code indicating the title of	or contents of a document, report or supporting ite	O ID 2/2
			DD	Monthly Usage	
				For monthly metered customers only (restorements).	
			KJ	Meter Changeout when Meter Agent C Usage	hanges – Monthly
				For monthly metered customers only (r customers)	not interval metered

			X4	Summary Report (defined for PA and MD)
			X5	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. 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 Code indicating type of	action O AN 1/2
			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	Re Ide Ce	Reference Identifie Reference information a Identification Qualifier	
			element is required	his is a cancellation of usage, that is $BPT01 = 01$, this and should contain the transaction identification number 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

	Ref.	Data		y	
Must Use	Des. DTM01	Element 374	<u>Name</u> Date/Time Qualifi	or	<u>Attributes</u> M ID 3/3
Must Ost	DIMOI	5/4		date or time, or both date and time	M 10 5/5
			649	Document Due	
				The date that the non-billing party mu transaction back to the billing party.	st provide the 810
				If a file is received by the billing party and the billing party cannot process it, the non-billing party (via email, phone means).	, they must notify
Must Use	DTM02	373	Date Date expressed as CCY	YMMDD	X DT 8/8
Must Use	DTM03	337	HHMMSSDD, where H	pur clock time as follows: HHMM, or HHMMSS, = hours (00-23), M = minutes (00-59), S = intege decimal seconds are expressed as follows: D = ten	er seconds (00-59) and
			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
DE Use:	Not used
MD Use:	Not Used
Example:	MEA**NP*.66667

Must Use	Ref. <u>Des.</u> MEA02	Data <u>Element</u> 738	<u>Name</u> Measurement Qua Code identifying a speci	llifier fic product or process characteristic to which a me	Attributes O ID 1/3 easurement applies
			NP	Percent Participation	
				This code is used to indicate the percer load that is supplied by the ESP. This multiplication of two fields that are on transaction, AMT*7N (Participating In AMT*QY (Eligible Load).	is the the 814
Must Use	MEA03	739	Measurement Value The value of the measure		X R 1/20
				"1" represents 100 percent. Decimal numers from 1 percent to 99 percent.	mbers less than "1"

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:	 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. N105 and N106 further define the type of entity in N101. 							
PA Use:	Required							
NJ Use:	Required							
DE Use:	Required							
MD Use:	Required							
Example:	N1*8S*LDC COMPANY*1*007909411							

			Data Elem	ient Summary		
Must Use	Ref. <u>Des.</u> N101	Data <u>Element</u> 98	<u>Name</u> Entity Identifier C Code identifying an individual 8S	Code n organizational entity, a physical location Consumer Service Provider (CSP)	Μ	ributes ID 2/3 operty or an
				LDC		
Must Use	N102	93	Name Free-form name		X	AN 1/60
			LDC Company Nat	me		
Must Use	N103	66	Identification Cod Code designating th Code (67)	le Qualifier he system/method of code structure used	X 1 for I	ID 1/2 dentification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with I Suffix	Four C	Character
Must Use	N104	67	Identification Cod Code identifying a	le party or other code	X	AN 2/20
			LDC D-U-N-S Nur	mber 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:	 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. N105 and N106 further define the type of entity in N101. 							
PA Use:	Required							
NJ Use:	Required							
DE Use:	Required							
MD Use:	Required							
Example:	N1*SJ*ESP COMPANY*9*007909422ESP							

	Ref.	Data	Data Litin	int Summary		
	<u>Des.</u>	Element	Name		<u>Attı</u> M	ributes
Must Use	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location individual			ID 2/3 operty or an
			SJ	Service Provider		
				ESP		
Must Use	N102	93	Name Free-form name		X	AN 1/60
			ESP Company Name	2		
Must Use	N103	66	Identification Code Code designating the Code (67)	Qualifier e system/method of code structure used	X for Ic	ID 1/2 dentification
			1	D-U-N-S Number, Dun & Bradstreet		
			9	D-U-N-S+4, D-U-N-S Number with Fo Suffix	our C	haracter
Must Use	N104	67	Identification Code Code identifying a p		X	AN 2/20
			ESP D-U-N-S Numb	per or D-U-N-S + 4 Number		

Segment: Position: Loop: Level: Usage: Max Use: Purpose: Syntax Notes: Semantic Notes: Comments:	 N1 Name (G7=Renewable Energy Provider Name) 080 N1 Heading Optional 1 To identify a party by type of organization, name, and code 1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required. 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.
PA Use:	2 N105 and N106 further define the type of entity in N101. Not used
NJ Use:	Required
DE Use:	Not used
MD Use:	Not used
Example:	N1*G7*RENEWABLE COMPANY*9*007909422GPM

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	Ref.	Data				
	Des.	<u>Element</u>	Name		Att	<u>ributes</u>
Must Use	N101	98	Entity Identifier C	ode	Μ	ID 2/3
			Code identifying an organizational entity, a physical location, property or a G7 Entity Providing the Service			vidual
				Renewable Energy Provider		
Must Use	N102	93	Name Free-form name		X	AN 1/60
			Renewable Energy I	Provider Company Name		
Must Use	N103	66	Identification Code Code designating the sys 1	e Qualifier tem/method of code structure used for Identificati D-U-N-S Number, Dun & Bradstreet	X on Co	ID 1/2 de (67)
			9	D-U-N-S+4, D-U-N-S Number with F Suffix	our C	Character
Must Use	N104	67	Identification Code Code identifying a party	or other code	X	AN 2/20
			Kenewable Energy	Provider D-U-N-S Number or D-U-N-S	+4 ľ	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:	 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. N105 and N106 further define the type of entity in N101. 							
Notes:	Please note that while you may place your N1 segments in any order, the REF segments that follow must be contained within the N1*8R loop.							
PA Use:	Required							
NJ Use:	Required							
DE Use:	Required							
MD Use:	Required							
Example:	N1*8R*CUSTOMER NAME							

	Ref. <u>Des.</u>	Data Element	Name		Attributes
Must Use	N101	98	Entity Identifier C		A ID 2/3
			8R	Consumer Service Provider (CSP) Custo	mer
				End Use Customer	
Must Use	N102	93	Name Free-form name	2	K AN 1/60
			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
DE Use:	Required
MD Use:	Required
Example:	REF*12*1239485790

			Data Elem	ent Summary	
Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	<u>Name</u> Reference Identifie Code qualifying the Refe	e e	Attributes M ID 2/3
			12	Billing Account	
				LDC-assigned account number for the customer. Must appear as it does on the excluding punctuation (spaces, dashes leading and trailing zeros must be incl	he customer's bill , etc.) Significant
Must Use	REF02	127	Reference Identifie Reference information a Identification Qualifier	cation s defined for a particular Transaction Set or as spe	X AN 1/30 crified by the Reference

Segment: Position: Loop: Level: Usage: Max Use: Purpose:	REF Reference Identification (45=LDC Old Account Number) 120 N1 Heading Optional 12 To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
	 If either C04003 or C04004 is present, then the other is required. If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
PA Use:	Required if account number has changed within the last 60 days.
NJ Use:	Required if account number has changed within the last 60 days.
DE Use:	Not used
MD Use:	Not Used by BGE, PEPCO and Delmarva. PE: Required if the account number has changed in the last 60 days.
Example:	REF*45*939581900

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

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:	Same as PA
DE Use:	Same as PA
MD Use:	Same as PA
Example:	REF*11*1394959

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

Segment:	REF Reference Identification (BLT=Billing Type)
Position:	120
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required.
	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.	Data				
	Des.	<u>Element</u>	<u>Name</u>		X12	<u>Attributes</u>
Must Use	REF01	128	Reference Identifi Code qualifying the Ref	e e	Μ	ID 2/3
			BLT	Billing Type		
				Identifies whether the bill is consolida ESP, or whether each party will render See REF02 for valid values.		
Must Use	REF02	127	Reference IdentificationXAN 1/30Reference information as defined for a particular Transaction Set or as specified by the ReferenceIdentification Qualifier			
			LDC - The LDC ESP - The ESP	CT, valid values for REF02 are: C bills the customer bills the customer arty bills the customer for their portion		
			Note: In New Jerse	ey, 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					
Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		tification Qualifier Reference Identification	X12 Attributes M ID 2/3
			PC	Production Code	
				Identifies the party that is to calculate bill.	the charges on the
Must Use	REF02	127	Reference Iden Reference informati Identification Quality	on as defined for a particular Transaction Set or as spe	X AN 1/30 ccified by the Reference
			LDC - The L	PC, valid values for REF02 are: DC calculates the charges on the bill (Rate h party calculates its portion of the bill (Dua	• /

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

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

Segment:	${f PTD}$ 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
NJ Use: DE Use:	Required Required
	•

Must Use	Ref. <u>Des.</u> PTD01	Data <u>Element</u> 521	<u>Name</u> Product Transfer 7 Code identifying the type		<u>Attı</u> M	<u>ributes</u> ID 2/2
			BB	Monthly Billed Summary		
			This information is obtained from the reflect the billing data for this account measure level.			

Note:

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

Segment:	${f DTM}$ 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

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

Segment:	${f DTM}$ 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

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Time Qu	ialifier	<u>Att</u> M	<u>ributes</u> ID 3/3
	DIMOI	0/1		ype of date or time, or both date and time	171	10 0/0
			151	Service Period End		
Must Use	DTM02	373	Date Date expressed as	CCYYMMDD	X	DT 8/8

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 Eleme	ent Summary		
Must Use	Ref. <u>Des.</u> QTY01	Data <u>Element</u> 673	<u>Name</u> Quantity Qualifier Code specifying the type	of quantity	<u>Attı</u> M	ributes ID 2/2
			D1	Billed		
				Used when Quantity in QTY02 is a "B	illed"	' quantity.
Must Use	QTY02	380	Quantity Numeric value of quantity	y	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	easurement Code in which a value is being expressed, or manner in	M n whicl	ID 2/2 n a measurement
			KH	Kilowatt Hour		
				Billed Kilowatt Hours as shown on the May or may not be the same as measur 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 Eleme	ent Summary		
Must Use	Ref. <u>Des.</u> QTY01	Data <u>Element</u> 673	<u>Name</u> Quantity Qualifion		<u>Attı</u> M	<u>ributes</u> ID 2/2
wrust Use	QIIII	075	Quantity Qualifier Code specifying the type		IVI	ID 2/2
			D1	Billed		
				Used when Quantity in QTY02 is a "B	illed'	' quantity.
Must Use	QTY02	380	Quantity Numeric value of quantity	у	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	leasurement Code s in which a value is being expressed, or manner in	M whicl	ID 2/2 h a measurement
			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 Eltin	cht Summar y		
Must Use	Ref. <u>Des.</u> QTY01	Data <u>Element</u> 673	<u>Name</u> Quantity Qualifier Code specifying the type		<u>Att</u> M	<u>ributes</u> ID 2/2
			KA	Estimated Quantity Delivered		
				Used when the quantity delivered is an quantity.	ı estir	nated
			QD	Actual Quantity Delivered		
				Used when the quantity delivered is an	actu	al quantity.
Must Use	QTY02	380	Quantity Numeric value of quantit	у	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	leasurement Code s in which a value is being expressed, or manner in	M n whic	ID 2/2 h a measurement
			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:	 If either PTD02 or PTD03 is present, then the other is required. 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 Elem	ent Summary	
Must Use	Ref. <u>Des.</u> PTD01	Data <u>Element</u> 521	<u>Name</u> Product Tronsfor	Turne Code	<u>Attributes</u> M ID 2/2
wiust Use	PIDUI	521	Product Transfer Code identifying the typ		M ID 2/2
			SU	Summary	
				A summary loop will be provided for consumption for every unit of measur the account.	

Note:

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

Segment:	${f DTM}$ 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	

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					

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374			<u>ributes</u> ID 3/3	
Must Use	DTM02	373	150 Date Date expressed as	Service Period Start	X	DT 8/8

Segment:	${f DTM}$ 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:	
Commonter	

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					

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374			<u>ributes</u> ID 3/3	
Must Use	DTM02	373	151 Date Date expressed a	Service Period End	X	DT 8/8

Segment:	QTY Quantity
Position:	110
Loop:	QTY
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify quantity information
Syntax Notes:	1 At least one of QTY02 or QTY04 is required.
	2 Only one of QTY02 or QTY04 may be present.
Semantic Notes:	1 QTY04 is used when the quantity is non-numeric.
Comments:	
Notes:	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

	Ref.	Data		
	Des.	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type	of quantity
			KA	Estimated Quantity Delivered
				Used when the quantity delivered is an estimated
				quantity.
			QD	Actual Quantity Delivered
				Used when the quantity delivered is an actual quantity.
			87	Actual Quantity Received (Net Metering)
				Used when the net generation quantity received is
				actual.
			9H	Estimated Quantity Received (Net Metering)
				Used when the net generation quantity received is
				estimated.
Must Use	QTY02	380	Quantity Numeric value of quantity	y X R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	easurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			K3	Kilovolt Amperes Reactive Hour (kVARH)
				Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
			KH	Kilowatt Hour

Segment:	PTD Product Transfer and Resale Detail (PM=Metered Services Detail)
Position:	010
Loop:	PTD
Level:	Detail
Usage:	Mandatory
Max Use:	
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	1 If either PTD02 or PTD03 is present, then the other is required.
	2 If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	PTD Loops may be sent in any order.
	There will be a separate PTD loop for each unit of measurement for each 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

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

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

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

Segment:	${f DTM}$ 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:	
Purpose: Syntax Notes:	 To specify pertinent dates and times At least one of DTM02 DTM03 or DTM05 is required. If DTM04 is present, then DTM03 is required.

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

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

Segment:	${f DTM}$ 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:

Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.
Required when a meter is changed and the meter agent does not change.
Same as PA.
Same as PA
Same as PA
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 Elenio	ent Summary		
	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	ributes_
Must Use	DTM01	374	Date/Time Qualifie	er	Μ	ID 3/3
			Code specifying type of c	late or time, or both date and time		
			514	Transferred		
				Exchanged meter read date		
Must Use	DTM02	373	Date		Х	DT 8/8
			Date expressed as CCYY	MMDD		

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

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

Segment:	REF Reference Identification (NH=LDC Rate Class)					
Position:	030					
Loop:	PTD					
Level:	Detail					
Usage:	Optional					
Max Use:	20					
Purpose:	To specify identifying information					
Syntax Notes:	1 At least one of REF02 or REF03 is required.					
	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					

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

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 account will be not be used.
NILL	the account level, this segment will be not be used.
NJ Use:	Optional
DE Use:	Optional
MD Use:	Optional
Example:	REF*PR*123

			Data Elem	ent Summary		
Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128	<u>Name</u> Reference Identific Code qualifying the Refe		<u>X12</u> M	2 Attributes ID 2/3
			PR	Price Quote Number		
				LDC Rate Subclass – Used to provide classification of a rate.	furthe	er
Must Use	REF02	127	Reference Identifie Reference information a Identification Qualifier	cation s defined for a particular Transaction Set or as spe	X cified b	AN 1/30 by the Reference

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
DE Use:	Required if consumption is provided at a meter level
MD Use:	Required if consumption is provided at a meter level
Example:	REF*JH*A

			Data	Element Summary		
Must Use	Ref. <u>Des.</u> REF01	Data <u>Element</u> 128		entification Qualifier the Reference Identification	<u>Att</u> M	<u>ributes</u> ID 2/3
			JH	Meter Role		
Must Use	REF02	127	Reference Identification X AN 1/3 Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A			AN 1/30 by the Reference
			 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 to (do nothing). 			
				gnore - this consumption did not contrib total (do nothing).	oute to the su	ummarized

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:	p
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

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

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

Segment:	QTY Quantity						
Position:	110						
Loop:	QTY						
Level:	Detail						
Usage:	Optional						
Max Use:	1						
Purpose:	To specify quantity information						
Syntax Notes:	1 At least one of QTY02 or QTY04 is required.						
	2 Only one of QTY02 or QTY04 may be present.						
Semantic Notes:	1 QTY04 is used when the quantity is non-numeric.						
Comments:							
Notes:	 There will be one QTY loop for each of the QTY03 Units of Measurement listed below 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. <u>Des.</u>	Data <u>Element</u>	<u>Name</u>	Attributes
Must Use	QTY01	673	Quantity Qualifier	M ID 2/2
			Code specifying the type	of quantity
			KA	Estimated Quantity Delivered
				Used when the quantity delivered is an estimated
				quantity.
			QD	Actual Quantity Delivered
				Used when the quantity delivered is an actual quantity.
			87	Actual Quantity Received (Net Metering)
				Used when the net generation quantity received is actual.
			9Н	Estimated Quantity Received (Net Metering)
				Used when the net generation quantity received is
				estimated.
Must Use	QTY02	380	Quantity Numeric value of quantit	y X R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	Leasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement
			K1	Kilowatt Demand (kW)
				Represents potential power load measured at predetermined intervals
			K2	Kilovolt Amperes Reactive Demand (kVAR)
				Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand
				usage meets or exceeds a defined parameter

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

Segment:	MEA Measurements
Position:	160
Loop:	QTY
Level:	Detail
Usage:	Optional
Max Use:	40
Purpose:	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)
Syntax Notes:	1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
	2 If MEA05 is present, then MEA04 is required.
	3 If MEA06 is present, then MEA04 is required.
	4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
	5 Only one of MEA08 or MEA03 may be present.
Semantic Notes:	1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
Comments:	1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.
Notes:	The MEA segment is sent for each QTY loop. The MEA will indicate the "time of use" that applies to the QTY. If meter readings are included in the MEA, they will indicate the "time of use" that the meter readings apply to.
PA Use:	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.	Data	N .		•		
	Des.	<u>Element</u>	<u>Name</u>		<u>Att</u>	ributes	
Must Use	MEA01	737		eference ID Code	0	ID 2/2	
			Code identifying the l	broad category to which a measurement applies			
			AA	Meter reading-beginning actual/endin	ng actu	ıal	
			AE	Meter reading-beginning actual/endin	ng estir	mated	
			AF	Actual Total			
			BO	Meter Reading as Billed			
				Used when billing charges are based agreements or pre-established usage usage			
			EA	Meter reading-beginning estimated/e	nding	actual	
			EE	Meter reading-beginning estimated/e	nding	estimated	
Must Use	MEA02	738	Measurement Q Code identifying a sp	ualifier ecific product or process characteristic to which a m	O neasurer	ID 1/3 ment applies	
			PRQ	Consumption			
Must Use	MEA03	739	Measurement V The value of the meas		Х	R 1/20	
			Represents quantity of consumption delivered for service period. Contai difference in the meter readings (or as measured by the meter) multiplied various factors, excluding Power Factor.				

.....

Must Use	MEA04	355	Unit or Basis for N Code specifying the unit has been taken	M in whic	ID 2/2 h a measurement		
			K1	Kilowatt Demand			
			K2	Represents potential power load meas predetermined intervals Kilovolt Amperes Reactive Demand	ured a	ıt	
				Reactive power that must be supplied of customer's equipment; billable whe usage meets or exceeds a defined para	n kilo	watt demand	
			K3	Kilovolt Amperes Reactive Hour Represents actual electricity equivaler hours; billable when usage meets or esparameters			
			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					
	MEAQ		and ending reads for and ending reads ar reads, you only pro Condition for MD Condition for NJ:	: Required for residential if printed on the Required for all rate classes if printed of d. If the meter does not provide begin/er	provic rovide he LD n the]	de beginning e beg/ending DC bill. LDC bill, and	
Must Use	MEA06	741	Range Maximum The value specifying the	e maximum of the measurement range	X	R 1/20	
			Ending reading or s	ding or single reading (e.g., demand).			
			Residential. If the meter provides beginning usage, then you must provide beginning If the meter does not provide beg/ending on. residential if printed on the LDC bill.	g and e	ending reads		
Must Use	MEA07	935	Measurement Sign	nificance Code	0	ID 2/2	
				mark, qualify or further define a measur	remen	t value	
			41	Off Peak			
			42	On Peak			
			43 51	Intermediate			
			31	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

Must Use	Ref. <u>Des.</u> MEA02	Data <u>Element</u> 738	<u>Name</u> Measurement Qualifier Code identifying a specific product or process characteristic to	Attributes O ID 1/3 which a measurement applies		
Must Use	MEA03	739	MU Multiplier Measurement Value	X R 1/20		
			The value of the measurement Represents the meter constant when MEA02 equa equals 1, do not send this MEA segment.	Is "MU". When the multiplier		

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 Eleme	ent Summary	
Must Use	Ref. <u>Des.</u> MEA02	Data <u>Element</u> 738	<u>Name</u> Measurement Qual Code identifying a specifi	Attributes O ID 1/3 easurement applies	
			ZA	Power Factor	
				Relationship between watts and volt - necessary to supply electric load	amperes
Must Use	MEA03	739	Measurement Valu The value of the measurement	-	X R 1/20
			-	er Factor when MEA02 equals "ZA". V the value is 1, do not send this MEA se	

Segment:	${f MEA}$ 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:	 At least one of MEA03 MEA05 MEA06 or MEA08 is required. If MEA05 is present, then MEA04 is required. If MEA06 is present, then MEA04 is required.
Semantic Notes: Comments:	 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. 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06. 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.
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

Must Use	Ref. <u>Des.</u> MEA02	Data <u>Element</u> 738	<u>Name</u> Measurement Qua Code identifying a specif	lifier fic product or process characteristic to which a me	Attributes O ID 1/3 asurement applies		
			CO	Transformer Loss Multiplier			
				When a customer owns a transformer a transformer loss is not measured by the			
Must Use	MEA03	MEA03	se MEA03 7.	e MEA03 739	Measurement Valu The value of the measure		X R 1/20
			Represents the Tran	sformer Loss Multiplier when MEA02 e	equals "CO".		

Segment:	\mathbf{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:	 If either PTD02 or PTD03 is present, then the other is required. 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

	Ref.	Data				
	Des.	<u>Element</u>	<u>Name</u>		Att	<u>ributes</u>
Must Use	PTD01	521	Product Tran	1sfer Type Code	Μ	ID 2/2
			Code identifying	the type of product transfer		
			BC	Unmetered Services Summary		

Note:

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

Segment:	DTM Date/Time Reference (150=Service Period Start)
Position:	020
Loop:	PTD
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required.
	2 If DTM04 is present, then DTM03 is required.
	3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	Demined if there are unnected and incoming on this account

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

Must Use	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 374	<u>Name</u> Date/Time Qa	ualifier ype of date or time, or both date and time	<u>Att</u> M	<u>ributes</u> ID 3/3
Must Use	DTM02	373	150 Date Date expressed as	Service Period Start	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:	
DA Lico.	Required if there are unmetered services on this account

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

Must Liss	Ref. <u>Des.</u> DTM01	Data <u>Element</u> 274	Name	element Summary		ributes
Must Use	DTM01	374	Date/Time Q Code specifying t	ype of date or time, or both date and time	М	ID 3/3
			151	Service Period End		
Must Use	DTM02	373	Date Date expressed as	CCYYMMDD	X	DT 8/8

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

	Ref.	Data	Data Elem	ent Summary		
Must Use	<u>Des.</u> QTY01	Element 673	<u>Name</u> Quantity Qualifier Code specifying the type		<u>Att</u> M	<u>ributes</u> ID 2/2
			QD	Actual Quantity Delivered		
				Used when the quantity delivered is an	actu	al quantity.
				All States: Whether unmetered service	es are	estimated,
				calculated, or actual, they will be code	d as a	ictual.
Must Use	QTY02	380	Quantity Numeric value of quantit	у	X	R 1/15
Must Use	QTY03	355	Unit or Basis for M Code specifying the units has been taken	leasurement Code s in which a value is being expressed, or manner in	M n whic	ID 2/2 h a measurement
			99	Watts		
			K1	Kilowatt Demand (kW)		
			КН	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

Required
Required
Required
Required
SE*28*00000001

Data Element	Summary
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			Data Element Summary		
	Ref.	Data			
	Des.	<u>Element</u>	Name	Att	<u>ributes</u>
Must Use	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and	M SE segn	NO 1/10
Must Use	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set by the originator for a transaction set	M	AN 4/9

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*1111111	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*1111111	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*1111111	
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*2222222	
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.

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*1111111111111	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*2222228	
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

<u>Scenario - Single meter with time of day billing, Month 1</u> 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*444444444	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*222233S	
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

<u>Scenario - 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*2222668	
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*33333668	
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

<u>Scenario - Single meter.</u>, <u>Demand and KWH meter (non-interval)</u>, <u>Month 1</u> 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
D1W 049 19990202 1700	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*77777777777	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 2	4, KWH 22,348 (no readings available). Billed demand 20,000.	is so per contract.
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*88888888888888888888888888888888888	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	
867 Monthly Usage (4010)	73	IG867MUv6-2x

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

<u>Scenario - Multiple services, metered and 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*999999999999	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

<u>Scenario - Unmetered Service alone.</u> 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

<u>Scenario - Single meter totalized (one rate), month 2</u> 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*1111111111111	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*2222228	
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

<u>Scenario - Cancel Months 1 and 2.</u> 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*1111111111111	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*2222228	
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*22222228	
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)

<u>Scenario - Restatement of usage for Months 1 and 2.</u> Total usage for 2 months is 2043.

DDT*00*DEE01 000210C*10000210*DD	
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*11111111111111	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*222222S	
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

<u>Scenario - FINAL during month 2.</u> 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*444444444	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*222233S	
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

<u>Scenario - 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
D1W1 049 19990202 1700	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>

Scenario: 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, Maryland & New Jersey (not PSE&G) 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*1111111	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*1111111	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.

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*1111111	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

<u>Net Meter / Customer Generation Scenario 3A: Consumption greater than generation</u> 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*PRO*600*KH*300*900*51	Total generation, with begin/end readings

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<u>Net Meter / Customer Generation Scenario 3B: Generation greater than consumption</u> 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.

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*8S*ESP COMPANY*9*007909422ESP1 ESP Company N1*8K*CUSTOMER NAME – ACCT6 Customer name REF*11*13949594 ESP Account number REF*11*13949594 ESP Account number REF*11*13949594 Bill Calculator REF*11*13949594 Bill Calculator PTD*BB Monthly Billed Summary Loop DTM*150*20120101 Start period DTM*150*20120131 End period QTY*D1*0*KH Monthly billed KH PTD*SU Metered services Summary loop DTM*150*20120101 Start period REF*11*A Meter Kall loop – Consumption Meter DTM*150*20120101 Start period REF*	BPT*00*REF06-120201*20120201*DD	Meter detail loop
represented as Eastern prevailing time. N1*8S*EDC COMPANY*1*007909411 LDC Company N1*SJ*ESP COMPANY*9*007909422ESP1 ESP Company N1*SJ*ESP COMPANY*9*007909422ESP1 ESP Company N1*SJ*ESP COMPANY*9*007909422ESP1 ESP Company N1*SJ*ESP COMPANY*9*007909422ESP1 ESP Account number REF*113949594 ESP Account number REF*BLT*DUAL Bill Uspe REF*PC*DUAL PTD*BB Monthly Billed Summary Loop DTM*150*20120101 Start period QTY*01*0*KH Monthly Billed KH PTD*SU DTM*150*20120101 Start period DTM*150*20120131 End period REF*NM* Meter Role REF*NG*2222266S <td>DTM*649*20120202*1700</td> <td></td>	DTM*649*20120202*1700	
N1*SJ*ESP COMPANY*9*007909422ESP1ESP CompanyN1*8R*CUSTOMER NAME – ACCT6Customer nameREF*12*6323423480LDC Account numberREF*11*13949594ESP Account numberREF*11*13949594ESP Account numberREF*BLT*DUALBill typeREF*BLT*DUALBill CalculatorPTD*BBMonthly Billed Summary LoopDTM*150*20120101Start periodQTY*01*0*KHMonthly billed KHPTD*SUMeter desrvices Summary loopDTM*150*20120101Start periodQTY*810*KHMonthly billed KHPTD*SUMeter desrvices Summary loopDTM*151*20120131End periodQTY*8200*KHCalculated summary of all metered for KH / kvarh onlyPTD*PMMeter detail loop – Consumption MeterDTM*150*20120101Start periodPTD*PMMeter RoleREF*1H*AMeter RoleREF*1H*AMeter RoleREF*1H*AMeter RoleREF*1H*AMeter detail loop – Consumption MeterQTY*0P400*KHConsumption, with begin/end readingsPTD*PMMeter detail loop – Generation MeterDTM*150*20120101Start periodREF*1H*AMeter detail loop – Generation MeterDTM*150*2012011End periodREF*1H*5Meter detail loop – Generation MeterDTM*150*2012011Start periodREF*1H*5Meter detail loop – Generation MeterDTM*150*20120101Start periodREF*1H*5Meter detail loop – Generation MeterDTM*150*20120101Start period </td <td></td> <td></td>		
N1*SJ*ESP COMPANY*9*007909422ESP1ESP CompanyN1*8R*CUSTOMER NAME – ACCT6Customer nameREF*12*6323423480LDC Account numberREF*11*13949594ESP Account numberREF*11*13949594ESP Account numberREF*BLT*DUALBill typeREF*BLT*DUALBill CalculatorPTD*BBMonthly Billed Summary LoopDTM*150*20120101Start periodQTY*01*0*KHMonthly billed KHPTD*SUMeter desrvices Summary loopDTM*150*20120101Start periodQTY*810*KHMonthly billed KHPTD*SUMeter desrvices Summary loopDTM*151*20120131End periodQTY*8200*KHCalculated summary of all metered for KH / kvarh onlyPTD*PMMeter detail loop – Consumption MeterDTM*150*20120101Start periodPTD*PMMeter RoleREF*1H*AMeter RoleREF*1H*AMeter RoleREF*1H*AMeter RoleREF*1H*AMeter detail loop – Consumption MeterQTY*0P400*KHConsumption, with begin/end readingsPTD*PMMeter detail loop – Generation MeterDTM*150*20120101Start periodREF*1H*AMeter detail loop – Generation MeterDTM*150*2012011End periodREF*1H*5Meter detail loop – Generation MeterDTM*150*2012011Start periodREF*1H*5Meter detail loop – Generation MeterDTM*150*20120101Start periodREF*1H*5Meter detail loop – Generation MeterDTM*150*20120101Start period </td <td>N1*8S*LDC COMPANY*1*007909411</td> <td>LDC Company</td>	N1*8S*LDC COMPANY*1*007909411	LDC Company
REF*12*6323423480LDC Account numberREF*11*13949594ESP Account numberREF*BLT*DUALBill typeREF*PC*DUALBill CalculatorPTD*BBMonthly Billed Summary LoopDTM*150*20120101Start periodQTY*D1*0*KHMonthly billed KHPTD*SUMetered services Summary loopDTM*151*20120131End periodQTY*D1*0*KHMonthly billed KHPTD*SUMetered services Summary loopDTM*150*20120101Start periodQTY*D1*200*KHCalculated summary of all metered for KH / kvarh onlyPTD*PMMeter detail loop - Consumption MeterDTM*151*20120131End periodREF*NH*AMeter RoleREF*NH*AMeter RoleREF*NH*AMeter RoleREF*NH*AConsumptionMEA*AA*PRQ*400*KH*20000*20400*51Total consumption, with begin/end readingsPTD*PMMeter detail loop - Generation MeterDTM*150*20120101Start periodREF*NH*AMeter RoleREF*NH*AMeter RoleREF*NH*AMeter RoleREF*NH*AMeter detail loop - Generation MeterDTM*150*20120101Start periodDTM*150*20120101Start periodRE*MC*333366SMeter NumberREF*NH*AMeter RoleREF*NH*AMeter RoleRE*NG*333366SMeter NumberREF*NH*SMeter RoleREF*NH*SMeter RoleREF*NH*SMeter RoleREF*NH*SMeter RoleREF*NH*SMeter Role<	N1*SJ*ESP COMPANY*9*007909422ESP1	
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REF*BLT*DUALBill typeREF*PC*DUALBill CalculatorPTD*BBMonthly Billed Summary LoopDTM*150*20120101Start periodDTM*151*20120131End periodQTY*D1*0*KHMonthly billed KHPTD*SUMetered services Summary loopDTM*151*20120101Start periodDTM*151*20120101Start periodQTY*87*200*KHCalculated summary of all metered for KH / kvarh onlyPTD*PMMeter detail loop - Consumption MeterDTM*151*20120101Start periodDTM*150*20120101Start periodPTD*PMMeter RoleREF*MG*222266SMeter NumberREF*IH*AMeter RoleREF*IH*AMeter detail loop - Generation MeterDTM*151*20120131End periodREF*MG*222266SMeter RoleREF*IH*AMeter RoleREF*IH*AMeter RoleREF*IH*AMeter RoleDTM*151*20120101Start periodDTM*151*20120101Start periodDTM*151*20120101Start periodMET*AAA*PRQ*400*KHConsumptionTotal consumption, with begin/end readingsPTD*PMMeter detail loop - Generation MeterDTM*151*20120131End periodREF*IMG*333366SMeter NumberREF*IM*SMeter RoleREF*IM*SMeter RoleREF*IM*SMeter RoleREF*IM*SMeter RoleREF*1M*SMeter RoleREF*1M*SMeter RoleREF*1M*SMeter RoleREF*1M*SMeter Role<	REF*12*6323423480	LDC Account number
REF*PC*DUALBill CalculatorPTD*BBMonthly Billed Summary LoopDTM*150*20120101Start periodDTM*151*20120131End periodQTY*D1*0*KHMonthly billed KHPTD*SUMetered services Summary loopDTM*151*20120101Start periodDTM*151*20120131End periodQTY*8200*KHCalculated summary of all metered for KH / kvarh onlyPTD*PMMeter detail loop - Consumption MeterDTM*150*20120101Start periodDTM*150*20120101Start periodDTM*150*20120101Start periodDTM*150*20120101Start periodDTM*150*20120101Start periodREF*MG*222266SMeter NumberREF*JH*AMeter RoleREF*JH*AMeter RoleREF*JH*AMeter detail loop - Generation MeterDTM*150*20120101Start periodDTM*150*20120101Start periodRE*1X*6.0Number of dials or digitsQTY*QD*400*KHConsumption, with begin/end readingsPTD*PMMeter detail loop - Generation MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter RoleREF*MG*3333366SMeter Role<	REF*11*13949594	ESP Account number
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PTD*PMMeter detail loop – Consumption MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*2222266SMeter NumberREF*JH*AMeter RoleREF*IX*6.0Number of dials or digitsQTY*QD*400*KHConsumptionMEA*AA*PRQ*400*KH*20000*20400*51Total consumption, with begin/end readingsPTD*PMMeter detail loop – Generation MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*JH*SMeter RoleREF*JH*SMeter RoleREF*JX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	DTM*151*20120131	End period
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DTM*151*20120131End periodREF*MG*2222266SMeter NumberREF*JH*AMeter RoleREF*IX*6.0Number of dials or digitsQTY*QD*400*KHConsumptionMEA*AA*PRQ*400*KH*20000*20400*51Total consumption, with begin/end readingsPTD*PMMeter detail loop – Generation MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*JH*SMeter RoleREF*JH*SMeter RoleREF*IX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	PTD*PM	Meter detail loop – Consumption Meter
REF*MG*2222266SMeter NumberREF*JH*AMeter RoleREF*JX*6.0Number of dials or digitsQTY*QD*400*KHConsumptionMEA*AA*PRQ*400*KH*20000*20400*51Total consumption, with begin/end readingsPTD*PMMeter detail loop – Generation MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*JH*SMeter RoleREF*IX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	DTM*150*20120101	Start period
REF*JH*AMeter RoleREF*JX*6.0Number of dials or digitsQTY*QD*400*KHConsumptionMEA*AA*PRQ*400*KH*20000*20400*51Total consumption, with begin/end readingsPTD*PMMeter detail loop - Generation MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*JH*SMeter RoleREF*IX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	DTM*151*20120131	End period
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MEA*AA*PRQ*400*KH*20000*20400*51Total consumption, with begin/end readingsPTD*PMMeter detail loop – Generation MeterDTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*JH*SMeter RoleREF*IX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	REF*IX*6.0	Number of dials or digits
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	QTY*QD*400*KH	Consumption
DTM*150*20120101Start periodDTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*JH*SMeter RoleREF*IX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	MEA*AA*PRQ*400*KH*20000*20400*51	Total consumption, with begin/end readings
DTM*151*20120131End periodREF*MG*3333366SMeter NumberREF*JH*SMeter RoleREF*IX*6.0Number of dials or digitsQTY*87*600*KHActual Generation	PTD*PM	Meter detail loop – Generation Meter
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	DTM*150*20120101	Start period
REF*JH*S Meter Role REF*IX*6.0 Number of dials or digits QTY*87*600*KH Actual Generation	DTM*151*20120131	End period
REF*IX*6.0 Number of dials or digits QTY*87*600*KH Actual Generation	REF*MG*3333366S	Meter Number
QTY*87*600*KH Actual Generation	REF*JH*S	
	REF*IX*6.0	Number of dials or digits
MEA*AA*PRQ*600*KH*300*900*51 Total generation, with begin/end readings	QTY*87*600*KH	Actual Generation
	MEA*AA*PRQ*600*KH*300*900*51	Total generation, with begin/end readings

Pennsylvania Net Metering / Customer Generation Examples ("Bank Rollover")

Scenario is for single meter reading both consumption and generation. Month 1 is net generation applied into 'bank'. Month 2 is net consumption with bank applied to bill but not fully exhausted. Month 3 is net consumption with bank applied to bill and exhausted with remaining consumption billed to customer.

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*800*KH	Net KH – 800KH excess generation
PTD*PM	Meter detail loop – Consumption Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*1111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*100*KH	Actual Consumption
MEA*AA*PRQ*100*KH*21000*21100*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop – Generation Loop
DTM*150*20120101	Start period
DTM*151*20120131	End period
REF*MG*1111111	Meter Number
REF*JH*S	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*900*KH	Actual Generation
MEA*AA*PRQ*900*KH*100*1000*51	Total generation, with begin/end readings

Month 1- Customer net generates 800KH into 'bank', billed KH is zero.

Month 2- Customer net consumes 500KH reducing the 800KH 'bank' by 500KH, billed KH remains 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*20120201	Start period
DTM*151*20120228	End period
QTY*D1*0*KH	Monthly billed KH
PTD*SU	Metered services Summary loop
DTM*150*20120201	Start period
DTM*151*20120228	End period
QTY*QD*500*KH	Net KH – 500KH consumption
PTD*PM	Meter detail loop – Consumption Loop
DTM*150*20120201	Start period
DTM*151*20120228	End period
REF*MG*1111111	Meter Number

REF*JH*A Meter Role REF*IX*6.0 Number of dials or digits QTY*QD*700*KH Actual Consumption MEA*AA*PRQ*700*KH*21100*21800*51 Total consumption, with begin/end readings PTD*PM Meter detail loop - Generation Loop DTM*150*20120201 Start period End period DTM*151*20120228 REF*MG*11111111 Meter Number REF*JH*S Meter Role REF*IX*6.0 Number of dials or digits OTY*87*200*KH **Actual Generation** MEA*AA*PRQ*200*KH*1000*1200*51 Total generation, with begin/end readings

Month 3- Customer net consumes 500KH, empties the remaining 'bank' of 300KH, billed net of consumption and the bank which is 200KH.

the bunk which is 200KH.	
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*20120301	Start period
DTM*151*20120331	End period
QTY*D1*200*KH	Monthly billed KH
PTD*SU	Metered services Summary loop
DTM*150*20120301	Start period
DTM*151*20120331	End period
QTY*QD*500*KH	Net KH – 500KH consumption
PTD*PM	Meter detail loop – Consumption Loop
DTM*150*20120201	Start period
DTM*151*20120228	End period
REF*MG*1111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*800*KH	Actual Consumption
MEA*AA*PRQ*800*KH*21800*22600*51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop – Generation Loop
DTM*150*20120201	Start period
DTM*151*20120228	End period
REF*MG*11111111	Meter Number
REF*JH*S	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*87*300*KH	Actual Generation
MEA*AA*PRQ*300*KH*1200*1500*51	Total generation, with begin/end readings

<u>New Jersey (PSE&G)</u> <u>Net Metering / Customer Generation Examples</u>

Net Meter / Customer Generation PSE&G 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.

There is one PM with the QTY 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*1111111	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
QTY*87*200*KH	Actual Generation
MEA*AA*PRQ*200*KH*300*500*51	Total generation, with begin/end readings

<u>Net Meter / Customer Generation PSE&G Scenario 1B: Generation greater than consumption</u> 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.

There is one PM with the QTYlooped, one for the consumption KH (1000KH) and another for the generation KH (1300).

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*1111111	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
QTY*87*1300*KH	Actual Generation
MEA*AA*PRQ*1300*KH*300*1600*51	Total generation, with begin/end readings

Maryland – 867 Monthly Usage - Multiple meter exchange in same service period.

Service period 1/14/2013 to 2/13/20131st Meter Exchange on 1/17/20132nd Meter Exchange on 1/19/2013

BPT*00*1234567890*20130214*DD	Meter detail loop
DTM*649*20130217*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*8771441829	LDC Account number
REF*11*13949594	ESP Account number
REF*BLT*LDC	Bill type
REF*PC*DUAL	Bill Calculator
PTD*BB	Monthly Billed Summary loop
DTM*150*20130114	Start period
DTM*151*20130213	End period
QTY*D1*7187*KH	Monthly billed kWh
PTD*SU	Metered services Summary loop
DTM*150*20130114	Start period
DTM*151*20130213	End period
QTY*QD*7187*KH	Calculated summary of all metered for kWh / kvarh only
PTD*PM	Meter detail loop
DTM*150*20130114	Start period
DTM*514*20130117	Meter Change Out Date
REF*MG*OLDMETER1	Old Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*710*KH	Consumption
MEA*AA*PRQ*710*KH***51	Consumption
PTD*PM	Meter detail loop
DTM*514*20130117	Start period
DTM*514*20130119	End period
REF*MG*MTREXCHG1	Meter Number of 1 st Meter Exchange
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*0*KH	Consumption
MEA*AA*PRQ*0*KH***51	Total consumption, with begin/end readings
PTD*PM	Meter detail loop
DTM*514*20130119	Start period
DTM*151*20130213	End period
REF*MG* MTREXCHG2	Meter Number of 2 nd Meter Exchange
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*6477*KH	Consumption
MEA*AA*PRQ*6477*KH***51	Total consumption, with begin/end readings