Pennsylvania New Jersey Delaware Maryland

Implementation Guideline

Electronic Data Interchange

1

TRANSACTION SET

867
Historical Usage
Ver/Rel 004010

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Summary of Changes

| June 29, 1999 Version 1.0 | Initial Release. Changes made since last draft: Changed "EGS" to "ESP" and "EDC" to "LDC" throughout the guideline. Added notes page with "LDC Definitions" and "ESP Definitions". Added "How to use the implementation guideline" page. In addition, changed all headers to the true X12 definition. Also corrected the Table on Page 4 to reflect X12 definitions and added the words "X12 Structure" to the title on that page. |
|---|--|
| July 21, 1999 Version 1.0a | Added Note for New Jersey to indicate all utilities plan to send summarized data by account (SU loop). No utility plans to send the data by meter (PM loop) Added note to clarify the utility will send the <u>current</u> transmission obligation and capacity obligation values. Historical Capacity and Transmission obligation is NOT being sent via this transaction. Corrected words in Example for transmission and capacity obligation. Added clarifying comment to SU loop to indicate there should be one SU loop for each unit of measurement (applies to all states). |
| October 1, 1999 Version 1.0c | Added Delaware Delmarva Information Moved rules from the data dictionary to the Notes section of the implementation guide. Clarified the PTD loops to indicate that there must be one loop per unit of measure. Clarifications to several NJ Use items. Clarification to examples. |
| November 4, 1999 Version 1.1 | This is a FINAL version for Pennsylvania and New Jersey |
| December 23, 1999 Draft version 1.1MD1 | Add Maryland use to document – the changes were added to the version 1.1 of the regional standards Added Data Dictionary Added Table of Contents |
| January 17, 2000 Draft version 1.1MD2 | Clarified REF*45 only used when LDC sending transaction. |
| February 24, 2000 Version 1.1MD3 | Clarified use of Old Acct Number (REF*45) for MD |
| March 31, 2000 Version 1.1MD4 | Clarified use of FG loop for MD Add load profile and LDC rate code to FG loop for MD future use This transaction is considered FINAL for Maryland |
| May 14, 2000 Version 1.2 | This document is a new finalized version of PA and MD. NJ is still using Version 1.1. |
| August 11, 2000 Version 1.2a | Indicate PSEG will use the PTD01=PM loop, rather than the PTD01=SU loop. |
| September 10, 2000 Version 1.3 | This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware (Delmarva only). |
| October 19, 2001 Version 1.3rev01 | Incorporate Delaware Electric Coop (DEC) information for Delaware Incorporate PA Change Control 028 – change REF*11 from optional to conditional if supplier of record is requesting usage |
| December 13, 2001 Version 1.3rev02 | Incorporate NJ Change Control to allow sending of LDC rate code and LDC load Profile in the "FG" loop. Incorporate DE Change Control to allow sending of LDC rate code and LDC load Profile in the "FG" loop. Indicate not used by DEC. |
| January 9, 2002 Version 2.0 | This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware. |
| December 10, 2003 Version 2.0.1 | Incorporate changes for NJ – add TOU values to both PTD*SU and PTD*PM loops. FG loop – make REF*NH required, add optional REF*BF. Add REF*TU to PTD*PM loop. |
| May 12, 2004 Version 2.0.2 | Incorporate changes for PA Change Control 040. This allows TOU information to be provided optionally. |

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| Incorporate NJ Change Control 005 (NJ CleanPower program changes) Incorporate NJ Change Control 006 to reflect current practices |
| Incorporate PA Change Control 043 (Add K4 – kilovolt amperes) Incorporate NJ Change Control 009 (NJ Clean Power – RECO unmetered) Incorporate NJ Change Control 011 (Clarify PSEG use of LDC Rate Type) |
| Incorporate NJ Change Control 012 (Change Billing Cycle (REF*BF) to indicate it will be required for all utilities. PSEG and RECO will be implementing in 1Q 2007). |
| Considered FINAL for PA and NJ |
| Incorporate NJ Change Control PSEG-E-HU (Indicate PSEG will send SU loop, will send REF*NH in FG loop) Incorporate PA Change Control 049 (PTD*FG, QTY*KC, QTY*KZ required for PJM participants)Incorporate PA Change Control 052 (REF*BF required for PJM participants) Incorporate PA Change Control 053 (REF*NH required for PJM participants) Incorporate PA Change Control 054 (REF*LO required for PJM participants) Incorporate PA Change Control 055 (PECO modifications RT loop) Incorporate MD Change Control RM17-HU |
| This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware. |
| Incorporate PA Change Control 65 (REF*LF and REF*SV required for First Energy) Incorporate PA Change Control 71 (add QTY01=KA as optional) Incorporate MD Change Control – Admin (Admin/Cleanup for MD) |
| This transaction is a new FINAL version for Pennsylvania, New Jersey, Maryland, and Delaware. |
| Incorporate PA Change Control 081 (Clarify RT loop) Incorporate PA Change Control 085 (REF*KY) Incorporate PA Change Control 090 (REF03 in REF*KY) Incorporate PA Change Control 093 (admin updates) Incorporate MD Change Control 008 (clarify PEPCO HU/HI support) Incorporate MD Change Control 010 (PEPCO AMI Support) |
| Moving to v6.0 to align versions across all transaction sets Cleaned up references to Allegheny and APS throughout document Incorporate PA Change Control 087 (add DTM segments to be used with QTY*KC and QTY*KZ to denote current and future values) Incorporate PA Change Control 095 (REF03 in REF*KY) Incorporate PA Change Control 101 (remove AMT*LD from request; rescinds CC 58) Incorporate PA Change Control 102 (increase REF*BF length in Data Dictionary) Incorporate PA Change Control 103 (uniform net meter consumption reporting) Incorporate MD Change Control 014 (make REF*LF & REF*SV same as PA) |
| Incorporate PA Change Control 114 (add REF*PR to PTD*FG & PTD*RT loops) Incorporate MD Change Control 026 (PHI new CIS; changes to 867HU) Incorporate MD Change Control 029 (uniform net meter data reporting) Incorporate MD Change Control 030 (Net Meter Indicator in REF*KY) Incorporate NJ Change Control Electric 015 (Net Meter Indicator in REF*KY) Incorporate NJ Change Control Electric 016 (uniform net meter data reporting) Incorporate NJ Change Control Electric 019 (ACE new CIS: changes to 867HU/HI) Incorporate NJ Change Control Electric 028 (clarify RECO support of 867HU) Incorporate NJ Change Control Electric 031 (RECO removal from IG) Incorporate NJ Change Control Electric 032 (PSE&G admin updates) |
| Incorporate NJ Change Control Electric 035 (REF*MG in PTD*FG to Optional) Incorporate MD Change Control 037 (clean up MD notes section) |
| |

| | version 6.9 |
|----------------|--|
| March 14, 2017 | • Incorporate NJ Change Control Electric 038 (Future PLC value/date for JCPL) |
| Version 6.3 | • Incorporate MD Change Control 043 (Future PLC value/date for Potomac Edison) |
| | • Incorporate MD Change Control 045 (Aggregate Net Energy Metering family |
| | identifier in REF*AN) |
| March 18, 2018 | • Incorporate PA Change Control 140 (Update to REF*KY gray box) |
| Version 6.4 | • Incorporate PA Change Control 147 (Incorporate Citizens & Wellsboro into IG) |
| | • Incorporate NJ Change Control Electric 044 (Update to REF*KY gray box) |
| | • Incorporate MD Change Control 050 (Update to REF*KY gray box) |
| March 22, 2019 | Incorporate PA Change Control 149 (Add PA Use to REF*AN) |
| Version 6.5 | • Incorporate MD Change Control 054 (Add new REF02 qualifiers to REF*AN) |
| | • Incorporate MD Change Control 056 (Clarify BGE Historical Usage in MD Notes) |
| | • Incorporate NJ Change Control Electric 048 (NJ Note – End of Clean Power Choice) |
| March 31, 2020 | • Incorporate PA Change Control 151v2 (FirstEnergy PA net meter data reporting) |
| Version 6.6 | • Incorporate PA Change Control 152 (Default months from 12 to 24) |
| | • Incorporate NJ Change Control Electric 051 (Default months from 12 to 24) |
| | • Incorporate MD Change Control 058 (Default months from 12 to 24) |
| March 25, 2022 | Incorporate MD Change Control 063 (Add DE notes for default 24 months) |
| Version 6.7 | |
| April 29, 2023 | Incorporate MD Change Control 068v2 (Add Energy Assistance support) |
| Version 6.8 | 5. 1 (-1 |
| April 30, 2024 | Incorporate PA Change Control 172 (Add PA Note for HU Matrix) |
| Version 6.9 | Incorporate MD Change Control 083 (Add MD Note for HU Matrix) |
| V CI SIOH 0.9 | - incorporate MD Change Control 003 (Add MD Note for no Matrix) |

General Notes

Use

- Historical Usage will be provided to an ESP upon Request. The request will be made using the 814E and 814HU documents.
- Historical Usage can be requested for an entity that is already a customer of the ESP
- Historical Usage can be requested for any customer that has not restricted the release
 of their historical usage. This is state dependent, some states allow this scenario, others
 do not.
- The Historical Usage Transaction Set is sent by the LDC only one time per ESP request. No corrections or changes will be transmitted. The Historical Usage data is correct for the point in time that is it requested. Subsequent adjustments to Historical Usage will not be transmitted to the ESP.
- If providing history totalized for an account, use "SU" (Summary) in PTD01, else if providing history by meter, use "PM" (Physical Meter) in PTD01.

LDC Definitions:

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

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

ESP Definitions:

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

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

Renewable Energy Provider Definition: The term Renewable Energy Provider in this document refers to the party that provides Renewable Energy Credits (RECs). This party does not provide generation to the account. Each state may refer to the Renewable Energy Provider by a different acronym:

• GPM – Green Power Marketer (New Jersey)

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

Pennsylvania Notes

The Pennsylvania default is 24 months of Historical Usage

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

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

Historical Usage Matrix for Pennsylvania

PA Change Control 172 approved Historical Usage Matrix version dated February 8th, 2024. The file named PA_Historical Usage Matrix_20240208.xlsx will be available for download from the PAPUC Website under Electricity > Electronic Data Exchange > EDEWG Files.

Maryland Notes

Demand

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

Historical Usage Reporting

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

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

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

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

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

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

Historical Usage Reporting Level

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

 totalized to account level (PTD*SU loop)

Net Meter Data Reporting Requirements

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

Net Meter Data Reporting Requirements (Cont.)

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

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- 1. When the customer's consumption is greater than generation for a given service period, the KH will be reported as net consumption (QTY01 w/actual = QD or estimated = KA) with the total generation subtracted from total consumption.
- 2. When the customer's generation is greater than consumption for a given service period, the KH will be reported as net generation (actual = 87 or estimated = 9H) with the total consumption subtracted from total generation).
- 3. In either scenario, the QTY02 will never be signed negative.

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

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

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

Historical Usage Matrix for Maryland

MD Change Control 083 approved Historical Usage Matrix version dated February 12th, 2024. The file named MD_Historical Usage Matrix_20240212.xlsx will be available for download from the MD PSC Website under Electricity > Working Groups > EDI Standards

New Jersey Notes

Historical Usage Information

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

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

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

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

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

Net Meter Data Reporting Requirements

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

- SU (Account Services Summary) Loop –reports consumption summarized/totalized for account by unit of measure for net metered customers. (used by Atlantic City Electric JCP&L)
 - 1. When the customer's consumption is greater than generation for a given service period, the KH will be reported as net consumption (QTY01 w/actual = QD or estimated = KA) with the total generation subtracted from total consumption.
 - 2. When the customer's generation is greater than consumption for a given service period, the KH will be reported as net generation (actual = 87 or estimated = 9H) with the total consumption subtracted from total generation).
 - 3. In either scenario, the QTY02 will never be signed negative.
- SU (Account Services Summary) Loop –reporting both consumption and billed usage for net metered customers. (used by PSE&G Only)
 - 1. Reports customer's billed usage in the QTY01 = QD. This value is the billed usage amount which is the net of the generation/consumption..
 - 2. Reports customer's actual KH consumption in the MEA segment. The QTY01 less the MEA03 = customer's generation KH.
 - 3. In either location (QTY02/MEA03) the value will never be signed negative.

NJ Clean Power Choice

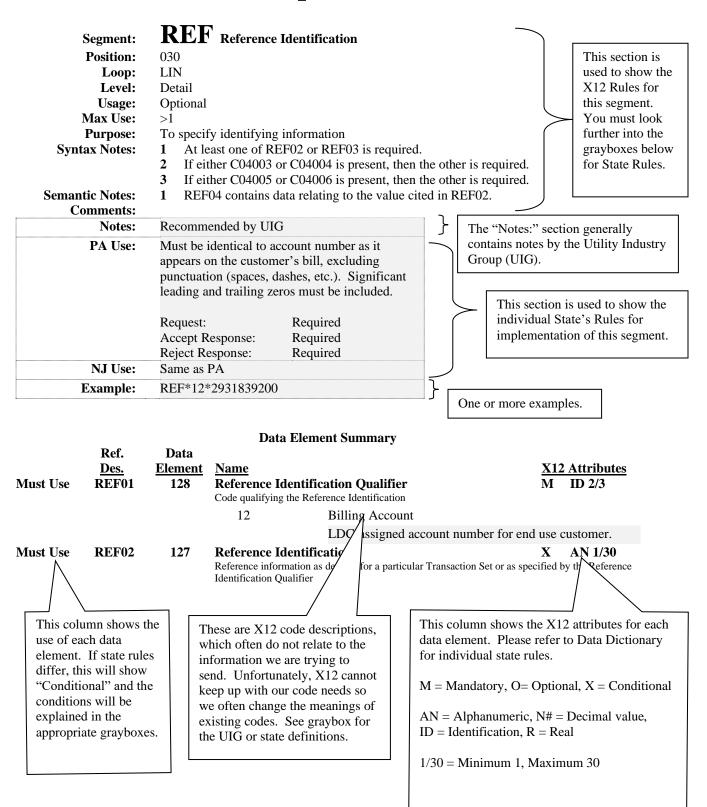
Pursuant to Board Order, Docket No. QO18040393, the Clean Power Choice Program is coming to an end effective February 28, 2019. The EDI segments and data elements used for Clean Power Choice will remain in the EDI Implementation Guidelines to support any cancel/rebill scenarios or for future use in the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

Delaware Notes

Historical Usage Information

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

How to Use the Implementation Guideline



867 Historical Usage X12 Structure

Functional Group ID=PT

Heading:

| | Pos. No. | Seg. <u>ID</u> | Name | Req. <u>Des.</u> | Max.Use | Loop <u>Repeat</u> | Notes and Comments |
|----------|-------------|-------------------|---|---------------------|---------|-----------------------|-----------------------|
| Must Use | 010 | ST | Transaction Set Header | M | 1 | | |
| Must Use | 020 | BPT | Beginning Segment for Product Transfer and Resale | M | 1 | | |
| | | | LOOP ID - N1 | | | 5 | |
| | 080 | N1 | Name | О | 1 | | |
| | 120 | REF | Reference Identification | О | 12 | | |

Detail:

| | Pos. <u>No.</u> | Seg. <u>ID</u> | Name LOOP ID - PTD | Req. Des. | Max.Use | Loop Repeat >1 | Notes and Comments |
|----------|--------------------|-------------------|------------------------------------|--------------|---------|----------------------|--------------------|
| Must Use | 010 | PTD | Product Transfer and Resale Detail | M | 1 | | |
| | 030 | REF | Reference Identification | O | 20 | | |
| | | | LOOP ID - QTY | | | >1 | |
| | 110 | QTY | Quantity | О | 1 | | |
| | 160 | MEA | Measurements | O | 40 | | |
| | 210 | DTM | Date/Time Reference | O | 10 | | |

Summary:

| | Pos. No. | Seg. ID | <u>Name</u> | Req. Des. | Max.Use | Loop <u>Repeat</u> | Notes and Comments |
|----------|-------------|------------|-------------------------|--------------|---------|-----------------------|-----------------------|
| | | | LOOP ID - CTT | • | · | 1 | |
| | 010 | CTT | Transaction Totals | О | 1 | | n1 |
| Must Use | 030 | SE | Transaction Set Trailer | M | 1 | | <u> </u> |

Transaction Set Notes

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

Data Dictionary for 867 Historical Usage

| Appl Field | Field Name | Description | EDI Element | Loop / Related EDI Qualifier | Data Type |
|---------------|-----------------------------------|---|-----------------------|---|--------------|
| 1 | Purpose Code | Transaction Set Purpose | BPT01 = 52 | | X(2) |
| 2 | Transaction Reference Number | Unique Number identifying this transaction. | BPT02 | | X(30) |
| 3 | System Date | Date this transaction was generated from sender's system | BPT03 | | 9(8) |
| 4 | Report Type Code | Code to identify this transaction contains detailed usage information | $BPT04 = \mathbf{DD}$ | BPT01 = 52 | X(2) |
| 5 | LDC Name | LDC's Name | N102 | N1: N101 = 8S | X(60) |
| 6 | LDC Duns | LDC's DUNS Number or DUNS+4 Number | N104 | N1: N101 = 8S N103 = 1 or 9 | X(13) |
| 7 | ESP Name | ESP's Name | N102 | N1: N101 = SJ | X(60) |
| 8 | ESP Duns | ESP's DUNS Number or DUNS+4 Number | N104 | N1: N101 = SJ N103 = 1 or 9 | X(13) |
| 8.3 | Renewable Energy Provider Name | Renewable Energy Provider 's Name | N102 | N1: N101 = G7 | X(60) |
| 8.4 | Renewable Energy Provider Duns | Renewable Energy Provider 's DUNS Number or DUNS+4 Number | N104 | N1: N101 = G7 N103 = 1 or 9 | X(13) |
| 9 | Customer Name | Customer Name | N102 | N1: N101 = 8R | X(60) |
| 10 | ESP Account Number | ESP Customer Account Number | REF02 | N1: N101 = 8R REF01 = 11 | X(30) |
| 11 | LDC Account Number | LDC Customer Account Number | REF02 | N1: N101 = 8R REF01 = 12 | X(30) |
| 11.2 | LDC Account Number - unmetered | LDC Customer Account Number – Unmetered | REF03 | N1: N101 = 8R REF01 = 12 REF03 = U | X(80) |
| 12 | Old Account Number | Previous LDC Customer Account Number | REF02 | N1: N101 = 8R REF01 = 45 | X(30) |

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

A PTD Loop will be provided for each type of consumption measured for the overall account (PTD01=SU) or by meter (PTD01 = PM) or by rate (PTD01=RT) in addition to the PTD loop that provides Scheduling Determinants when appropriate

| 13 | Loop Identification | Indicates if usage is provided totalized or by meter. | PTD01 = SU | | X(2) |
|------|---------------------|--|------------|-----------------------|-------|
| 13.1 | Channel Number | Indicates Channel Number | REF02 | PTD: REF01= 6W | X(30) |
| 13.2 | | Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered 87 = Actual Quantity Received (Net Meter) 9H = Estimated Quantity Received (Net Meter) | QTY01 | | X(2) |
| 13.3 | Quantity Delivered | Represents quantity of consumption delivered for billing period. | QTY02 | | 9(15) |
| 13.4 | Unit of Measurement | Indicates unit of measurement for quantity of consumption delivered during billing period. | QTY03 | | X(2) |

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

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

A PTD Loop will be provided for each type of consumption measured for the overall account (PTD01=SU) or by meter (PTD01 = PM) or by rate (PTD01=RT) in addition to the PTD loop that provides Scheduling Determinants when appropriate

| 15.1 | Loop Identification | Indicates if usage is provided totalized or by meter. | $PTD01 = \mathbf{RT}$ | | X(2) |
|-------|---|--|-----------------------|-------------------------|-----------|
| 15.2 | Profile Group | A code for the Load Profile used for this rate. Differs by LDC. Codes posted on LDC's Web site. | REF02 | PTD: REF01= LO | X(30) |
| 15.3 | LDC Rate Code | Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site | REF02 | PTD: REF01= NH | X(30) |
| 15.4 | LDC Rate Sub-Class | Code to provide further classification of LDC Rate Code | REF02 | PTD: REF01= PR | X(30) |
| 15.5 | Quantity Qualifier | Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered 87 = Actual Quantity Received (Net Meter) 9H = Estimated Quantity Received (Net Meter) | QTY01 | | X(2) |
| 15.6 | Quantity Delivered | Represents quantity of consumption delivered for billing period. | QTY02 | QTY01 | 9(15) |
| 15.7 | Quantity Delivered Unit of Measurement | Indicates unit of measurement for quantity of consumption delivered during billing period. | QTY03 | | X(2) |
| 15.8 | Consumption | Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor. | MEA03 | $MEA02 = \mathbf{PRQ}$ | 9(9).9(4) |
| 15.9 | Unit of Measure | Unit of measure for readings. | MEA04 | | X(2) |
| 15.10 | Measurement Significance Code | Code used to benchmark, qualify, or further define a measurement value. | MEA07 | | X(2) |
| 15.11 | Service Period Start | Start date of the period for which these readings are provided | DTM02 | QTY: DTM01 = 150 | X(8) |

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

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

A PTD Loop will be provided for each type of consumption measured for the overall account (PTD01=SU) or by meter (PTD01 = PM) or by rate (PTD01=RT) in addition to the PTD loop that provides Scheduling Determinants when appropriate

| 21 | Loop Identification | Indicates if usage is provided totalized or by meter. | $PTD01 = \mathbf{PM}$ | | X(2) |
|------|---|---|---|---|-----------|
| 22 | Meter Number | Serial number of this specific meter (may have multiple meters) | REF02 | PTD: REF01 = MG | X(30) |
| 23 | Meter Type | Code indicating type of consumption measured & interval at which measurements are taken. | REF02 | PTD: REF01 = MT | X(5) |
| 24 | Type of metering used for billing | Indicates the type of metering information that will be sent on the 867 transaction. | REF02= 41 (off peak) 42 (on peak) 43 (intermediate) or 51 (totalizer) | NM1: REF01 = TU REF03 = Meter Type (See REF*MT) | X(2) |
| 24.1 | Quantity Qualifier | Represents whether the quantity is actual or estimated: KA = Estimated Quantity Delivered QD = Actual Quantity Delivered 87 = Actual Quantity Received (Net Meter) 9H = Estimated Quantity Received (Net Meter) | QTY01 | | X(2) |
| 25 | Quantity Delivered | Represents quantity of consumption delivered for billing period. | QTY02 | QTY01 | 9(15) |
| 26 | Quantity Delivered Unit of Measurement | Indicates unit of measurement for quantity of consumption delivered during billing period. | QTY03 | | X(2) |
| 27 | Consumption | Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor. | MEA03 | MEA02 = PRQ | 9(9).9(4) |
| 28 | Unit of Measure | Unit of measure for readings. | MEA04 | | X(2) |
| 29 | Measurement Significance Code | Code used to benchmark, qualify, or further define a measurement value. | MEA07 | | X(2) |
| 30 | Service Period Start | Start date of the period for which these readings are provided | DTM02 | QTY: DTM01 = 150 | X(8) |
| 31 | Service Period End | End date of the period for which these readings are provided | DTM02 | QTY: DTM01 = 151 | X(8) |

PTD Loop for Scheduling Determinants (PTD01 = FG)

This PTD provides Scheduling Determinants when appropriate

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| | | | | V C1 510 | on 6.9 |
|------|---|--|-----------------------|----------------------------|--------|
| 32 | Loop Identification | Indicates if usage is provided totalized or by meter. | $PTD01 = \mathbf{FG}$ | | X(2) |
| 33 | Loss Factor | Loss Factor | REF02 | PTD:REF01= LF | X(30) |
| 34 | Profile Group | A code for the Load Profile used for this customer. Differs by LDC. Codes posted on LDC's Web site. | REF02 | PTD: REF01= LO | X(30) |
| 35 | LDC Rate Code | Code indicating the rate a customer is being charged by LDC per tariff. Codes posted on LDC's Web site | REF02 | PTD: REF01= NH | X(30) |
| 36 | LDC Rate Sub-Class | Code to provide further classification of LDC Rate Code | REF02 | PTD: REF01= PR | X(30) |
| 37 | LDC Billing Cycle | LDC Cycle on which the bill will be rendered | REF02 | PTD: REF01= BF | X(4) |
| 38 | Service Voltage | Service voltage | REF02 | PTD:REF01= SV | X(30) |
| 39 | Meter Number | Meter Number | REF02 | PTD: REF01=MG | X(2) |
| 40 | Special Meter Configuration Code | Used to convey there's a special meter present on the account. For example, Net Metering | REF02 | PTD: REF01 = KY | X(3) |
| 40.1 | Special Meter Configuration Information | PPLEU-used to report the max K1 (demand) the special meter supports | REF03 | PTD: REF01 = KY | X(80) |
| 41 | Aggregate Net Energy Meter Role | The role of the customer account in the Aggregate Net Energy Meter family | REF02 | PTD: REF01= AN | X(30) |
| 42 | Peak Load Contribution | Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM Peak). | QTY02 | PTD: QTY01 = KC | 9(15) |
| 43 | Unit of Measure | Indicates unit of measurement for quantity of consumption delivered during billing period. | QTY03 = K1 | PTD: $QTY01 = \mathbf{QD}$ | X(2) |
| 44 | Network Service Peak Load | Customer's peak load contribution provided to PJM for the Transmission Service calculation (coincident with LDC peak). | QTY02 | PTD: QTY01 = KZ | 9(15) |
| 45 | Quantity Delivered Unit of Measurement | Indicates unit of measurement for quantity of consumption delivered during billing period. | QTY03 = K1 | $PTD: QTY01 = \mathbf{QD}$ | X(2) |

Segment: ST Transaction Set Header

Position: 010

Loop:

Level: Heading Usage: Mandatory

Max Use: 1

Purpose:

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

Syntax Notes:

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

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

selects the Invoice Transaction Set).

Comments:

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

| 1 | Ref. | Data Element | Name Name | Attı | ributes |
|----------|------|-----------------|---|--------------|-------------------|
| Must Use | ST01 | 143 | Transaction Set Identifier Code | M | ID 3/3 |
| | | | Code uniquely identifying a Transaction Set | | |
| | | | Product Transfer and Resale Report | | |
| Must Use | ST02 | 329 | Transaction Set Control Number | \mathbf{M} | AN 4/9 |
| | | | Identifying control number that must be unique within the transaction set by the originator for a transaction set | function | al group assigned |

Segment: ${f BPT}$ Beginning Segment for Product Transfer and Resale

Position: 020

Loop:

Level: Heading Usage: Mandatory

Max Use:

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

transmit identifying data

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

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

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

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

Comments:

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

| Must Use | Ref. <u>Des.</u> BPT01 | Data Element 353 | Name Transaction Set P Code identifying purpos | • | Att: | ributes ID 2/2 |
|----------------|------------------------------|------------------------|---|--|---------|-------------------|
| | | | 52 | Response to Historical Inquiry Response to a request for historical me | eter re | ading. |
| Must Use | BPT02 | 127 | Reference Identification Reference information and Identification Qualifier | 1 | O | AN 1/30 |
| | | | - | on identification number assigned by the umber should be unique over all time. | origir | nator of this |
| Must Use BPT03 | | PT03 373 | Date Date (CCYYMMDD) | | M | DT 8/8 |
| | | | The transaction cre application system. | ation date – the date that the data was pro- | ocesse | ed by the |
| Must Use | BPT04 | 755 | Report Type Code Code indicating the title | e or contents of a document, report or supporting ite | O em | ID 2/2 |
| | | | DD | Distributor Inventory Report Usage | | |

Segment: N1 Name (8S=LDC Name)

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

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

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

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

Semantic Notes:

Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

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

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

| | Ref. | Data Florant | Name | Attributes |
|----------|---------------------|-----------------|---|----------------------------------|
| Must Use | <u>Des.</u> N101 | Element 98 | Entity Identifier Code Code identifying an organizational entity, a physical location, pro 8S Consumer Service Provider (Compared to the consumer Service Provider) | M ID 2/3 operty or an individual |
| | | | LDC | 31) |
| Must Use | N102 | 93 | Name Free-form name LDC Company Name | X AN 1/60 |
| Must Use | N103 | 66 | Identification Code Qualifier Code designating the system/method of code structure used for Id 1 D-U-N-S Number, Dun & Brad | ` ' |
| | | | 9 D-U-N-S+4, D-U-N-S Number Suffix | with Four Character |
| Must Use | N104 | 67 | Identification Code Code identifying a party or other code LDC D-U-N-S Number or D-U-N-S + 4 Number | X AN 2/20 |

 $N1 \ {\tt Name} \ ({\tt SJ=ESP} \ {\tt Name})$ **Segment:**

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

Max Use:

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

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

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

Semantic Notes:

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

organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.

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

| PA Use: | Required |
|----------|-----------------------------------|
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | N1*SJ*ESP COMPANY*9*007909422ESP1 |

| Must Use | Ref. <u>Des.</u> N101 | Data Element 98 | Name Entity Identifier Co Code identifying an organ SJ | nizational entity, a physical location, property or a Service Provider | M | ributes ID 2/3 vidual |
|----------|-----------------------------|-----------------------|--|--|---|-----------------------------|
| Must Use | N102 | 93 | Name Free-form name ESP Company Name | ESP e | X | AN 1/60 |
| Must Use | N103 | 66 | Identification Code Code designating the syst 1 9 | e Qualifier tem/method of code structure used for Identification D-U-N-S Number, Dun & Bradstreet D-U-N-S+4, D-U-N-S Number with For Suffix | | |
| Must Use | N104 | 67 | Identification Code Code identifying a party of ESP D-U-N-S Numb | • | X | AN 2/20 |

 ${\bf Segment:} \qquad {\bf N1} \ {\bf Name} \ ({\bf G7=Renewable} \ {\bf Energy} \ {\bf Provider} \ {\bf Name})$

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

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

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

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

Semantic Notes:

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

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

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

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

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

Segment: N1 Name (8R=Customer Name)

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

Max Use:

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

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

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

Semantic Notes:

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

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

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

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

| PA Use: | Required |
|----------|----------------|
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | N1*8R*JANE DOE |

| Must Use | Ref. <u>Des.</u> N101 | Data <u>Element</u> 98 | <u>Name</u> Entity Identifier (| Code anizational entity, a physical location, property or Consumer Service Provider (CSP) Cu | M an indi | |
|----------|-----------------------------|------------------------------|------------------------------------|--|---------------------|---------|
| Must Use | N102 | 93 | Name From form name | End Use Customer | X | AN 1/60 |
| | | | Free-form name Customer Name as | it appears on the customer's bill | | |

Segment: \mathbf{REF} Reference Identification (11=ESP Account Number)

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

Purpose: To specify identifying information

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

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

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

Comments:

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

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

Segment: REF Reference Identification (12=LDC Account Number)

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

Purpose: To specify identifying information

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

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

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

Comments:

| PA Use: | Required - Must be identical to account number as it appears on the customer's bill, excluding punctuation (spaces, dashes, etc.). Significant leading and trailing zeros must be included. |
|----------|---|
| NJ Use: | Same as PA |
| DE Use: | Same as PA |
| MD Use: | Same as PA |
| Example: | REF*12*519703123457 |

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

 ${f REF}$ Reference Identification (45=LDC Old Account Number) **Segment:**

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

Purpose: To specify identifying information

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

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

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

Comments:

| PA Use: | Required if account number changed in the last 60 days. |
|----------|--|
| | Note: Only used when LDC is sending this transaction. |
| NJ Use: | Same as PA |
| DE Use: | Not Used |
| MD Use: | Not Used by BGE, PEPCO, or Delmarva. PE: Required if the account number has changed in the last 60 days. |
| Example: | REF*45*451105687500 |

| | Ref. | Data | | | |
|-----------------|-------|----------------|---|----------------------------------|------------------|
| | Des. | Element | <u>Name</u> | <u>Attı</u> | <u>ributes</u> |
| Must Use | REF01 | 128 | Reference Identification Qualifier | M | ID 2/3 |
| | | | Code qualifying the Reference Identification | | |
| | | | 45 Old Account Numb | er | |
| | | | LDC's previous acc | count number for the end | luse |
| | | | customer. | | |
| Must Use | REF02 | 127 | Reference Identification | X | AN 1/30 |
| | | | Reference information as defined for a particular T. Identification Qualifier | ransaction Set or as specified b | by the Reference |

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

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

Max Use:

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

provide identifying data

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

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

Semantic Notes:

Comments:

| PA Use: | Required if providing Historical Usage summarized/totalized by account. There must be |
|-----------|---|
| | one loop for each unit of measurement. |
| NJ Use: | Same as PA |
| DE Use: | Same as PA |
| MD Use: | Same as PA |
| Examples: | PTD*SU |

Data Element Summary

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

Code identifying the type of product transfer

SU Summary

Consumption Summarized/Totalized for Account by

unit of measure.

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

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

Purpose: To specify identifying information

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

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

Semantic Notes:

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

Comments:

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

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

Segment: QTY Quantity

Position: 110
Loop: QTY
Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify quantity information

Syntax Notes: 1 At least one of QTY02 or QTY04 is required.

2 Only one of QTY02 or QTY04 may be present.

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

Comments:

| Notes: | Each QTY/MEA/DTM loop conveys consumption information about one metering period. |
|----------|--|
| PA Use: | Required |
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | QTY*QD*5210*KH |

| Data Element Summary | | | | |
|----------------------|---------------------------|----------------|---|---|
| | Ref. | Data | | |
| | Des. | Element | <u>Name</u> | <u>Attributes</u> |
| Must Use | $\overline{\text{QTY}01}$ | 673 | Quantity Qualifier | \overline{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. |
| March II. | OTVO | 200 | O a4:4 | X R 1/15 |
| Must Use | QTY02 | 380 | Quantity Numeric value of quantity | |
| Must Use | QTY03 | 355 | Unit or Basis for M | |
| Mast Osc | QIIOS | | | 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) |
| | | | IXZ | • |
| | | | | Reactive power that must be supplied for specific types |
| | | | | of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter |
| | | | К3 | Kilovolt Amperes Reactive Hour (KVARH) |
| | | | N.S | |
| | | | | Represents actual electricity equivalent to kilowatt |
| | | | | hours; billable when usage meets or exceeds defined parameters |
| | | | K4 | Kilovolt Amperes (KVA) |
| | | | KH | • • • • |
| | | | ΝП | Kilowatt Hour (KWH) |

Segment: MEA Measurements

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

Comments:

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

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

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

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

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

5 Only one of MEA08 or MEA03 may be present.

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

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

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

| Notes: | The MEA segment is sent for each QTY loop. The MEA will indicate the "time of use" that applies to the QTY. If meter readings are included in the MEA, they will indicate the "time of use" that the meter readings apply to. |
|-----------|---|
| PA Use: | Optional field for time of use other than totalizer (MEA07=51). Optional for time of use equal to totalizer (MEA07=51) if that is the only time of use on the account. |
| NJ Use: | Must use for time of use other than totalizer (MEA07=51). Optional for time of use equal to totalizer (MEA07=51) if that is the only time of use on the account. Note: For PSE&G net metered customer, the customer's actual KH consumption is reported in the MEA03. The MEA03 less the QTY02 equals customer generation. |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Examples: | MEA**PRQ*14*K1***51 (If meter measures multiple things, you need to send multiple QTY loops, one for each unit of measurement). |

| | Ref. | Data | Dutu Li | | | |
|----------|---------------|----------------|--|--|--------|-----------------------------|
| Must Use | Des. MEA02 | Element 738 | Name Measurement Code identifying a sp | Qualifier pecific product or process characteristic to which a me | O | ributes ID 1/3 nent applies |
| | | | PRQ | Consumption | | |
| Must Use | MEA03 | 739 | Measurement V The value of the mea | | X | R 1/20 |
| | | | difference in the | tity of consumption delivered for service per meter readings (or as measured by the mete excluding Power Factor. | | |
| Must Use | MEA04 | 355 | Unit or Basis for Measurement Code M ID 2/2 Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | | |
| | | | K1 | Kilowatt Demand | | |
| | | | K2 | Represents potential power load measured predetermined intervals Kilovolt Amperes Reactive Demand | ured a | t |
| | | | | Reactive power that must be supplied of customer's equipment; billable when usage meets or exceeds a defined para | n kilo | watt demand |
| | | | K3 | Kilovolt Amperes Reactive Hour | | |

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| | | | | Version 6.9 |
|----------|--------------|-----|------------------|--|
| | | | | Represents actual electricity equivalent to kilowatt |
| | | | | hours; billable when usage meets or exceeds defined parameters |
| | | | K4 | Kilovolt Amperes (KVA) |
| | | | K5 | Kilovolt Amperes Reactive |
| | | | KH | Kilowatt Hour |
| Must Use | MEA07 | 935 | Measurement S | ignificance Code O ID 2/2 |
| | | | Code used to ber | chmark, qualify or further define a measurement value |
| | | | 41 | Off Peak |
| | | | 42 | On Peak |
| | | | 43 | Intermediate |
| | | | 51 | Total |
| | | | | Totalizer |
| | | | 66 | Shoulder |

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

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

Purpose: To specify pertinent dates and times

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

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

| PA Use: | Required |
|----------|------------------|
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | DTM*150*19990630 |

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

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

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

Purpose: To specify pertinent dates and times

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

2 If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

| PA Use: | Required |
|----------|------------------|
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | DTM*151*19990701 |

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

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

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

Max Use:

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

provide identifying data

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

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

Semantic Notes:

Comments:

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

| | Ref. | Data | NT. | | A 44 . 93 . 4 |
|----------|-------|----------------|----------------------------|--------------------------------|-------------------|
| | Des. | <u>Element</u> | <u>Name</u> | | <u>Attributes</u> |
| Must Use | PTD01 | 521 | Product Transfer Type Code | | M ID 2/2 |
| | | | Code identifying | the type of product transfer | |
| | | | RT | Rate | |
| | | | | Consumption Summarized/Totaliz | zed for Rate. |

Segment: \mathbf{REF} Reference Identification (LO=Load Profile)

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

Purpose: To specify identifying information

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

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

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

Comments:

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

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

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

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

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

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

Purpose: To specify identifying information

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

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

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

Comments:

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

Data Element Summary

| | Kei. | Data | | | |
|----------|-------|----------------|--|------------|----------------|
| | Des. | Element | <u>Name</u> | <u>Att</u> | <u>ributes</u> |
| Must Use | REF01 | 128 | Reference Identification Qualifier | M | ID 2/3 |
| | | | Code and if in a shall be former I double in a | | |

Code qualifying the Reference Identification

PR Price Ouote Number

LDC Rate Subclass – Used to provide further

classification of a rate.

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

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

Identification Qualifier

QTY Quantity **Segment:**

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

Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

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

Comments:

| Notes: | Each QTY/MEA/DTM loop conveys consumption information about one metering period. |
|----------|--|
| PA Use: | Required |
| NJ Use: | Used by PSE&G |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Example: | QTY*QD*5210*KH |

| | Ref. Des. | Data Element | Name | Attributes |
|----------|--------------|-----------------|--|---|
| Must Use | QTY01 | 673 | Quantity Qualifier | M ID 2/2 |
| | C | | Code specifying the type | |
| | | | KA | Estimated Quantity Delivered |
| | | | | Used when the quantity delivered is an estimated quantity. |
| | | | QD | Actual Quantity Delivered |
| | | | | Used when the quantity delivered is an actual quantity. |
| | | | 87 | Actual Quantity Received (Net Metering) |
| | | | | Used when the net generation quantity received is actual. |
| | | | 9H | Estimated Quantity Received (Net Metering) |
| | | | | Used when the net generation quantity received is estimated. |
| Must Use | QTY02 | 380 | Quantity Numeric value of quantity | X R 1/15 |
| Must Use | QTY03 | 355 | Unit or Basis for M Code specifying the units has been taken | leasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement |
| | | | K1 | Kilowatt Demand (KW) |
| | | | | Represents potential power load measured at predetermined intervals |
| | | | K2 | Kilovolt Amperes Reactive Demand (KVAR) |
| | | | | Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter |
| | | | K3 | Kilovolt Amperes Reactive Hour (KVARH) |
| | | | | Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters |
| | | | K4 | Kilovolt Amperes (KVA) |
| | | | KH | Kilowatt Hour (KWH) |

Segment: MEA Measurements

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

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

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

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

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

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

5 Only one of MEA08 or MEA03 may be present.

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

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

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

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

| | | | Duta Lici | ment Summary | | |
|----------|-------|----------------|---|--|---------|-----------------|
| | Ref. | Data | | | | |
| | Des. | <u>Element</u> | Name | | | ributes |
| Must Use | MEA02 | 738 | Measurement Qu | | O | ID 1/3 |
| | | | | cific product or process characteristic to which a m | easurer | nent applies |
| | | | PRQ | Consumption | | |
| Must Use | MEA03 | 739 | Measurement Va The value of the measurement | | X | R 1/20 |
| | | | difference in the n | ty of consumption delivered for service p neter readings (or as measured by the measured Power Factor. | | |
| Must Use | MEA04 | 355 | Unit or Basis for | Measurement Code | M | ID 2/2 |
| | | | Code specifying the ur has been taken | nits in which a value is being expressed, or manner | n whic | h a measurement |
| | | | K1 | Kilowatt Demand | | |
| | | | | Represents potential power load meas predetermined intervals | ured a | at |
| | | | K2 | Kilovolt Amperes Reactive Demand | | |
| | | | | 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 e parameters | | |
| | | | K4 | Kilovolt Amperes (KVA) | | |

| | | | | | | v cision 0.7 |
|----------|--------------|-----|-----------------|--|--------|--------------|
| | | | K5 | Kilovolt Amperes Reactive | | |
| | | | KH | Kilowatt Hour | | |
| Must Use | MEA07 | 935 | Measurement | Significance Code | O | ID 2/2 |
| | | | Code used to be | enchmark, qualify or further define a meas | uremen | t value |
| | | | 41 | Off Peak | | |
| | | | 42 | On Peak | | |
| | | | 43 | Intermediate | | |
| | | | 51 | Total | | |
| | | | | Totalizer | | |
| | | | 66 | Shoulder | | |
| | | | | | | |

 $DTM \ {\tt Date/Time} \ {\tt Reference} \ (150 \hbox{=-} Service \ {\tt Period} \ {\tt Date})$ **Segment:**

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

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

| PA Use: | Required |
|----------|------------------|
| NJ Use: | Used by PSE&G |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Example: | DTM*150*19990630 |

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

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

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

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

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

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

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

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

Max Use: 1

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

provide identifying data

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

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

Semantic Notes:

Comments:

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

Data Element Summary

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

Code identifying the type of product transfer

PM Physical Meter Information

Consumption Provided by Meter by unit of measure.

Segment: \mathbf{REF} Reference Identification (MG=Meter Number)

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

Purpose: To specify identifying information

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

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

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

Comments:

| PA Use: | Required |
|----------|---|
| NJ Use: | Required if providing Historical Usage by Meter; otherwise, not used. |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Example: | REF*MG*87876567 |

| Must Use | Ref. <u>Des.</u> REF01 | Data Element 128 | Name Reference Identific Code qualifying the | ation Qualifier Reference Identification | Att M | ributes ID 2/3 | |
|----------|------------------------------|------------------------|---|--|----------|-------------------|--|
| | | | MG | Meter Number | | | |
| | | | | Meter ID Serial Number | | | |
| Must Use | REF02 | 127 | Reference Identific | ation | X | AN 1/30 | |
| | | | Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier | | | | |

REF Reference Identification (MT=Meter Type) **Segment:**

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

To specify identifying information **Purpose:**

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

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

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

Comments:

Ref.

Data

| PA Use: | Optional |
|----------|---|
| NJ Use: | Required if providing Historical Usage by Meter; otherwise, not used. |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Example: | REF*MT*KHMON |

Data Element Summary

| Must Use | <u>Des.</u> REF01 | Element 128 | Name Reference Identification Qualifier Code qualifying the Reference Identification | | <u>X12</u> M | 2 Attributes ID 2/3 |
|----------|----------------------|----------------|--|---|-----------------|--------------------------|
| | | | MT | Meter Type | | |
| | | | | Billing Data Types and Interval Freque | iencies | 3 |
| Must Use | REF02 | 127 | Reference Identification Reference information as defined for a particular Transaction Set or as s Identification Qualifier | | X ecified b | AN 1/30 by the Reference |
| | | | two characters are | T, the meter type is expressed as a five-or the type of consumption, the last three of "COMBO" is used for a meter that recon | haracte | ers are the |

| Type of | Consumption | Metering Interval | | | |
|---------|----------------------------------|-------------------|-----------------------------------|--|--|
| K1 | Kilowatt Demand | Nnn | Number of minutes from 001 to 999 | | |
| K2 | Kilovolt Amperes Reactive Demand | ANN | Annual | | |
| K3 | Kilovolt Amperes Reactive Hour | BIA | Bi-annual | | |
| K4 | Kilovolt Amperes | BIM | Bi-monthly | | |
| K5 | Kilovolt Amperes Reactive | DAY | Daily | | |

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

Kilowatt Hour Monthly KH MON T9 Thousand Kilowatt Hours Quarterly QTR

For Example:

KHMON Kilowatt Hours Per Month

K1015 Kilowatt Demand per 15 minute interval

Other Valid Codes

COMBO This code is used to indicate that the meter has multiple measurements, e.g., one

meter that measures both kWh and Demand.

 $REF \ {\bf Reference\ Identification\ (NH-LDC\ Rate\ Class)}$ **Segment:**

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

Purpose: To specify identifying information

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

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

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

Comments:

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

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

 ${f REF}$ Reference Identification (TU=Type of Metering) **Segment:**

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

Purpose: To specify identifying information

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

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

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

Comments:

| PA Use: | Not Used |
|----------|---|
| NJ Use: | Not Used |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Example: | REF*TU*41*K1MON REF*TU*42*K1MON Multiple TU's will usually be sent on each 867!!! REF*TU*51*K1MON |

Data Element Summary

| Must Use | Ref. <u>Des.</u> REF01 | Data Element 128 | Name Reference Identic | fication Qualifier eference Identification | <u>X1</u> 2 | 2 Attributes ID 2/3 |
|----------|------------------------------|------------------|--|--|-------------|------------------------|
| | | | TU | Trial Location Code | | |
| | | | | Used to indicate the type of metering will be sent on the 867 transaction. | inforn | nation that |
| Must Use | REF02 | 127 | Reference Identi | fication | X | AN 1/30 |
| | | | Reference information Identification Qualifie | as defined for a particular Transaction Set or as sp | ecified | by the Reference |
| | | | 41 | Off Peak | | |
| | | | 42 | On Peak | | |
| | | | 43 | Intermediate | | |
| | | | 51 | Totalizer | | |
| Must Use | REF03 | 352 | Description A free-form descriptio | on to clarify the related data elements and their cont | X ent | AN 1/80 |

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

this element.

QTY Quantity **Segment:**

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

Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

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

Comments:

| Notes: | Each QTY/MEA/DTM loop conveys consumption information about one metering interval. |
|----------|--|
| PA Use: | Required |
| NJ Use: | Required if providing Historical Usage by Meter; otherwise, not used. |
| DE Use: | Not Used |
| MD Use: | Not Used |
| Example: | QTY*QD*5210*KH |

| | Ref. <u>Des.</u> | Data <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 Meter | | Estimated Quantity Received (Net Metering) | |
| | | | | Used when the net generation quantity received is estimated. |
| Must Use | QTY02 | 380 | Quantity Numeric value of quantity | X R 1/15 |
| Must Use | QTY03 | 355 | Unit or Basis for M Code specifying the units has been taken | leasurement Code M ID 2/2 in which a value is being expressed, or manner in which a measurement |
| | | | K1 | Kilowatt Demand (KW) |
| | | | | Represents potential power load measured at predetermined intervals |
| | | | K2 | Kilovolt Amperes Reactive Demand (KVAR) |
| | | | | Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter |
| | | | K3 | Kilovolt Amperes Reactive Hour (KVARH) |
| | | | | Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters |
| | | | K4 | Kilovolt Amperes (KVA) |
| | | | KH | Kilowatt Hour (KWH) |

Segment: MEA Measurements

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

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

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

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

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

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

5 Only one of MEA08 or MEA03 may be present.

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

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

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

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

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

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

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

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

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

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

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

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

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

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes:

Comments:

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

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

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

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

Max Use: 1

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

provide identifying data

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

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

Semantic Notes:

Comments:

| Notes: | This PTD Loop will be used to provide Scheduling Determinants, such as the Capacity | | | | | | |
|-----------|--|--|--|--|--|--|--|
| | Obligation (a.k.a. Load Responsibility) and Transmission Obligation for PJM customers. | | | | | | |
| PA Use: | Required for PJM Customers | | | | | | |
| NJ Use: | Required for PJM Customers | | | | | | |
| DE Use: | Same as NJ | | | | | | |
| MD Use: | Required for PJM customers | | | | | | |
| Examples: | PTD*FG | | | | | | |

Data Element Summary

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

Code identifying the type of product transfer

FG Flowing Gas Information

Scheduling Determinants: This loop will provide

information required by PJM.

Segment: **REF** Reference Identification (LF=Loss Factor)

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

Purpose: To specify identifying information

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

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

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

Comments:

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

| Must Use | Ref. <u>Des.</u> REF01 | Data <u>Element</u> 128 | | Identification Qualifier g the Reference Identification | <u>X12</u> M | 2 Attributes ID 2/3 |
|----------|------------------------------|-------------------------|----|---|-----------------|--------------------------|
| | | | LF | Load Planning Number Loss Factor | | |
| Must Use | REF02 | 127 | | Identification ormation as defined for a particular Transaction Set or as s _I Qualifier | X pecified | AN 1/30 by the Reference |

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

Purpose: To specify identifying information

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

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

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

Comments:

| PA Use: | Required for PJM participants Note: Peco provides this field in the PTD*RT loop rather than this loop. |
|----------|---|
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | REF*LO*GS |

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

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

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

Purpose: To specify identifying information

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

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

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

Comments:

| PA Use: | Required for PJM participants. |
|----------|--|
| | Note: Peco provides this field in the PTD*RT loop rather than this loop. |
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | REF*NH*GS1 |

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

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

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

Purpose: To specify identifying information

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

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

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

Comments:

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

Data Element Summary

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

Code qualifying the Reference Identification

PR Price Quote Number

LDC Rate Subclass – Used to provide further

classification of a rate.

Must Use REF02 127 Reference Identification X AN 1/30

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

Identification Qualifier

 $REF \ \ Reference \ Identification \ (BF=LDC \ Bill \ Cycle)$ **Segment:**

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

Purpose: To specify identifying information

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

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

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

Comments:

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

| | Ref. | Data | | | | |
|----------|-------|----------------|---|---|-----------------------------|--------------------------|
| | Des. | Element | <u>Name</u> | | <u>Att</u> | <u>ributes</u> |
| Must Use | REF01 | 128 | | entification Qualifier the Reference Identification | M | ID 2/3 |
| | | | BF | LDC Bill Cycle | | |
| Must Use | REF02 | 127 | Reference Id Reference inform Identification Ou | nation as defined for a particular Transaction S | X et or as specified | AN 1/30 by the Reference |

 $Segment: \quad REF \ Reference \ Identification \ (SV=Service \ Voltage)$

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

Purpose: To specify identifying information

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

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

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

Comments:

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

Data Element Summary

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

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

PRIMARY SECONDARY

Actual service voltage transmission value (Ex: 34.5kV)

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

Purpose: To specify identifying information

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

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

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

Comments:

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

| Must Use | Ref. <u>Des.</u> REF01 | Data Element 128 | | ntification Qualifier e Reference Identification | Att. M | ributes ID 2/3 |
|----------|------------------------------|------------------|---|--|-----------------------|--------------------------|
| | | | MG | Meter number | | |
| Must Use | REF02 | 127 | Reference Ide Reference informa Identification Qual | tion as defined for a particular Transaction Set o | X r as specified b | AN 1/30 by the Reference |
| | | | 1METER - | Only one meter on the account | | |
| | | | MULTIPLE - | Multiple meters on the account | | |
| | | | UNMETERED | O – unmetered service only | | |

 $\textbf{Segment:} \quad \textbf{REF} \text{ Reference Identification (KY=Special Meter Configuration)}$

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

Purpose: To specify identifying information

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

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

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

Comments:

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

Data Element Summary

| | Ref. <u>Des.</u> | Data Element | Name | , | X12 | 2 Attributes |
|-------------|---------------------|-----------------|---------------------|---|--------|--------------|
| _ | EF01 | 128 | Reference Identifi | cation Qualifier | M | ID 2/3 |
| | | | Code qualifying the | e Reference Identification | | |
| | | | KY | Site Specific Procedures, Terms, and C | Condi | tions |
| | | | | Special Meter Configuration | | |
| Must Use R | EF02 | 127 | Reference Identifi | | X | AN 1/30 |
| | | | | tion as defined for a particular Transaction ference Identification Qualifier | on Set | or as |
| | | | • | | | |
| | | | ASUN AWIN | Net Metering Solar | | |
| | | | AHYD | Net Metering Wind Net Metering Hydro | | |
| | | | ABIO | Net Metering Hydro Net Metering Biomass | | |
| | | | AWST | Net Metering Waste | | |
| | | | ACHP | Net Metering Combined Heat and Pov | ver | |
| | | | AMLT | Net Metering Multiple Different Source | | |
| | | | NSUN | Non-Net Metering Solar | | |
| | | | NWIN | Non-Net Metering Wind | | |
| | | | NHYD | Non-Net Metering Hydro | | |
| | | | NBIO | Non-Net Metering Biomass | | |
| | | | NWST | Non-Net Metering Waste | | |
| | | | NCHP | Non-Net Metering Combined Heat and | d Pov | ver |
| | | | NFOS | Non-Net Metering Fossil Fuel | | |
| | | | NMLT | Non-Net Metering Multiple Different | | |
| | | | NETMETER | Net Meter (Used for EDCs who will n specific type of net meter) | ot rep | ort the |
| F. Optional | REF03 | 352 | Description | | X | AN 1/80 |

A free-form description to clarify the related data elements and their content

PPLEU: Used for the output rating of the generation equipment reporting in KW and reflects the maximum generation the equipment can produce at any one time

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

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

Purpose: To specify identifying information

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

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

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

Comments:

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

| | | | Data Elem | Ciit Suiiiiiai y | | |
|----------|------------------------------|-------------------------|------------------------------------|---|-----------------|------------------------|
| Must Use | Ref. <u>Des.</u> REF01 | Data <u>Element</u> 128 | <u>Name</u> Reference Identific | cation Qualifier | <u>X12</u> M | 2 Attributes ID 2/3 |
| | | | Code qualifying the | Reference Identification Aggregate Net Energy Meter Role | | |
| | | | 11 | The role of the customer account in the Energy Meter family | e Agg | regate Net |
| Must Use | REF02 | 127 | Reference Identifie | cation | X | AN 1/30 |
| | | | specified by the Ref | ion as defined for a particular Transaction ference Identification Qualifier BGE & FE: Host Account with Gener PHI: Customer designated primary ho | ation | |
| | | | | Generation | | |
| | | | PARENT | BGE & FE: Not Used PHI: Host account with generation, no | ot the | primary |
| | | | CHILD | Child account, may or may not have it NOTE - The REF*KY segment is used account has its own generation. | | - |
| | | | GENERATOR | FE: Community Solar Host Account v BGE & PHI: Not Used | with C | Generation |
| | | | SUBSCRIBER | FE: Community Solar Child Account BGE & PHI: Not Used | | |

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

Purpose: To specify identifying information

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

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

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

Comments:

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

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

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

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

Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

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

| Comments: | |
|-----------|--|
| Notes: | Each QTY/MEA/DTM loop conveys consumption information about one metering period. |
| PA Use: | Required for PJM participants. The QTY/DTM loop may be sent twice depending on the time of year the Historical Usage is being provided. (PLC is effective June 1 - May 31) One iteration will show the current PLC and a second iteration will show the PLC that will be effective in the period defined in the DTM segment. Currently the PA EDCs change the PLC effective June 1st. Once the EDCs are aware of what the next effective PLC will be (typically in December) they should begin providing it on transactions. |
| | For example, in February 2010 the PLC values would be reported as: QTY*KC*476*K1 |
| | DTM*007****RD8*20090601-20100531 QTY*KC*450*K1 |
| | DTM*007****RD8*20100601-20110531 |
| | Whereas in September 2010 the PLC value would include only one loop because the following year's PLC is undetermined: QTY*KC*450*K1 DTM*007****RD8*20100601-20110531 |
| NJ Use: | Required. For the Peak Load Contribution in effect when the transaction is requested. Required for the Future Peak Load Contribution for JCPL when calculated and available. See PA Notes for implementation. NJ Note: PSE&G sends Capacity Obligation to PJM and suppliers. |
| DE Use: | Same as NJ |
| MD Use: | Required. This will be the Peak Load Contribution in effect when the transaction is requested. Potomac Edison – follows PA use of effective dates where Future Peak Load Contribution is sent when calculated and available. |
| Example: | QTY*KC*752*K1 |

Data Element Summary

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

predetermined intervals

Segment: DTM Date/Time Reference (007=PLC Effective Date)

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

Purpose: To specify pertinent dates and times

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

If DTM04 is present, then DTM03 is required.

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

Semantic Notes: Comments:

NJ Use:

| PA Use: | Required for PJM Participants |
|---------|---|
| | The QTY/DTM loop may be sent twice depending on the time of year the Historical Usage is being provided. (PLC is effective June 1 - May 31) One iteration will show the current PLC and a second iteration will show the PLC that will be effective in the period defined in the DTM segment. Currently the PA EDCs change the PLC effective June 1st. Once the EDCs are aware of what the next effective PLC will be (typically in December) they should begin providing it on transactions. |
| | For example, in February 2010 the PLC values would be reported as: QTY*KC*476*K1 DTM*007****RD8*20090601-20100531 QTY*KC*450*K1 |

Whereas in September 2010 the PLC value would include only one loop because the following year's PLC is undetermined:

Required for JCPL. Optional for other NJ EDCs. See PA Notes for implementation.

QTY*KC*450*K1

DTM*007****RD8*20100601-20110531

DTM*007****RD8*20100601-20110531

DE Use: Not Used

MD Use: Required for Potomac Edison. Optional for other MD LDCs. See PA Notes for implementation.

Example: DTM*007****RD8*20070601-20080531

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

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

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

Max Use:

Purpose: To specify quantity information

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

Only one of QTY02 or QTY04 may be present.

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

| Notes: | Each QTY/MEA/DTM loop conveys consumption information about one metering interval. |
|----------|---|
| PA Use: | Required for PJM participants. The QTY/DTM loop may be sent twice when the Utility is providing both the current NSPL and the NSPL that will be effective for a subsequent period. This will occur for short period of time between when the future value is sent via the 814C and the actual date the future value takes effect. |
| | For example, you may receive either two loops: QTY*KZ*476*K1 |
| | DTM*007****RD8*20100101-20101231 |
| | QTY*KZ*450*K1 |
| | DTM*007****RD8*20110101-20111231 |
| | Or just one: |
| | QTY*KZ*450*K1 |
| | DTM*007****RD8*20110101-20111231 |
| | The effective dates for PA EDC implementation is as follows: First Energy, PECO, & PPLEU: must support NLT 5/10/2013. Duquesne: will support NLT 1/31/2014 |
| NJ Use: | Required. This will be the Network Service Peak Load in effect when the transaction is requested. |
| | NJ Note: PSE&G sends Transmission Load to PJM and suppliers. |
| DE Use: | Same as NJ |
| MD Use: | Required. This will be the Network Service Peak Load in effect when the transaction is requested. Potomac Edison – follows PA use where Future Network Service Peak Load is sent when calculated and available. |
| Example: | QTY*KZ*752*K1 |

| Must Use | Ref. <u>Des.</u> QTY01 | Data <u>Element</u> 673 | Name Quantity Qualifier Code specifying the type | of quantity | Attı M | ributes ID 2/2 |
|----------|------------------------------|-------------------------|--|---|------------|------------------------|
| | | | KZ | Corrective Action Requests - Written | | |
| | | | | Network Service Peak Load: Custome contribution provided to PJM for the T calculation (coincident with LDC peak | ransn | |
| Must Use | QTY02 | 380 | Quantity Numeric value of quantity | y | X | R 1/15 |
| Must Use | QTY03 | 355 | Unit or Basis for M Code specifying the units has been taken | leasurement Code in which a value is being expressed, or manner in | M which | ID 2/2 n a measurement |
| | | | K1 | Kilowatt Demand | | |
| | | | | Represents potential power load measurpredetermined intervals | ired a | t |

Segment: DTM Date/Time Reference (007=NSPL Effective Date)

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

Purpose: To specify pertinent dates and times

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

- 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 for PJM Participants |
| | NSPL is for January 1 - December 31 |
| | The QTY/DTM loop may be sent twice when the Utility is providing both the current NSPL and the NSPL that will be effective for a subsequent period. This will occur for short period of time between when the future value is sent via the 814C and the effective date of the future value. |
| | For example, you may receive either two loops: |
| | QTY*KZ*476*K1 DTM*007****RD8*20100101-20101231 |
| | QTY*KZ*450*K1 |
| | DTM*007****RD8*20110101-20111231 |
| | Or just one: |
| | QTY*KZ*450*K1 |
| | DTM*007****RD8*20110101-20111231 |
| NJ Use: | Optional. See PA Notes for implementation. |
| DE Use: | Not Used |
| MD Use: | Required for Potomac Edison. Optional for other MD LDCs. See PA Notes for implementation. |
| Example: | DTM*007****RD8*20070601-20080531 |

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

Segment: SE Transaction Set Trailer

Position: 030

Loop:

Level: Summary Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes: Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

| PA Use: | Required |
|----------|-----------------|
| NJ Use: | Required |
| DE Use: | Required |
| MD Use: | Required |
| Example: | SE*23*000000001 |

| | Ref. | Data | | | |
|----------|------|----------------|---|----------------------|---------------------------|
| | Des. | Element | <u>Name</u> | Att | <u>ributes</u> |
| Must Use | SE01 | 96 | Number of Included Segments Total number of segments included in a transaction set including ST and S | M SE segn | N0 1/10 nents |
| 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 function | AN 4/9 nal group assigned |

Example: Historical Usage Summarized by Account

Heading:

| BPT*52*1999070112300001*19990701*DD | Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>Usage</i> |
|-------------------------------------|--|
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| REF*45*451105687500 | Old LDC Account Number |

Detail:

| Segment Contents | Element Description |
|------------------|----------------------|
| PTD*SU | Summary Loop for kwh |
| QTY*QD*5210*KH | Quantity (kwh) |
| DTM*150*19990529 | Service Period Start |
| DTM*151*19990630 | Service Period End |
| QTY*QD*5210*KH | Quantity (kwh) |
| DTM*150*19990427 | Service Period Start |
| DTM*151*19990529 | Service Period End |
| QTY*QD*4850*KH | Quantity (kwh) |
| DTM*150*19990327 | Service Period Start |
| DTM*151*19990427 | Service Period End |

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

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

Example: Historical Usage Summarized by Rate

Heading:

| BPT*52*1999070112300001*19990701*DD | Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>Usage</i> |
|-------------------------------------|--|
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| REF*45*451105687500 | Old LDC Account Number |

Detail:

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

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

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

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

Example: Historical Usage Summarized by Meter

Heading:

| BPT*52*1999070112300001*19990701*DD | Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 1999070112300001 , Transaction Date: 19990701 , Report Type Code: DD , <i>Usage</i> |
|-------------------------------------|--|
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| REF*45*451105687500 | Old LDC Account Number |

Detail:

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

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

| PTD*FG | Scheduling Determinants Loop |
|------------------|------------------------------|
| REF*BF*01 | Bill Cycle |
| REF*LO*RS | Load Profile |
| REF*NH*RESNH | LDC Rate Code |
| REF*PR*RESNH7187 | LDC Rate Sub-Class |
| QTY*KC*752*K1 | Peak Load Contribution |

| OTY*KZ*752*K1 | Network Service Peak Load |
|---------------|-----------------------------|
| O11 KZ 132 K1 | THE WOLK DELVICE I CAK LOAG |

Example: Historical Usage Requested by Renewable Energy Provider

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

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

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

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

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

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

| BPT*52*2012070112300001*20120701*DD | Transaction Set Purpose Code: 52, Response to Historical Inquiry |
|---|--|
| | Reference Identification: 2012070112300001, Transaction Date: 20120701, Report |
| N140041 D.C. COMPANIA 4007000411 | Type Code: DD , Usage |
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 N1*8R*JANE DOE | ESP Company Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| REF*45*451105687500 | Old LDC Account Number |
| PTD*RT | Rate Summary Loop for kwh |
| REF*LO*RS | Load Profile |
| REF*NH*RESNH | LDC Rate Code |
| QTY*QD*1944*KH | Net Consumption Quantity (kwh) |
| DTM*150*20120529 | Service Period Start |
| DTM*151*20120630 | Service Period End |
| QTY*87*311*KH | Net Generation Quantity (kwh) |
| DTM*150*20120427 | Service Period Start |
| DTM*151*20120529 | Service Period End |
| QTY*87*871*KH | Net Generation Quantity (kwh) |
| DTM*150*20120327 | Service Period Start |
| DTM*151*20120427 | Service Period End |
| QTY*QD*2166*KH | Net Consumption Quantity (kwh) |
| DTM*150*20120227 | Service Period Start |
| DTM*151*20120327 | Service Period End |
| PTD*FG | Scheduling Determinants Loop |
| REF*BF*01 | Bill Cycle |
| REF*KY*ASUN | Special Meter Configuration |
| REF*LF*2 | Loss Factor (FE Only; optional others) |
| REF*SV*SECONDARY | Service Voltage (FE Only; optional others) |
| QTY*KC*752*K1 | Peak Load Contribution |
| QTY*KZ*752*K1 | Network Service Peak Load |

Historical Usage Summarized by Meter – with Net Metering

| BPT*52*2012070112300001*20120701*DD | Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 2012070112300001 , Transaction Date: 20120701 , Report Type Code: DD , <i>Usage</i> |
|-------------------------------------|--|
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| REF*45*451105687500 | Old LDC Account Number |
| PTD*PM | Summary Loop for kwh |
| REF*MG*M1234567 | Meter Number |
| REF*MT*KHMON | Meter Type |
| REF*TU*51*KHMON | TOU Value |
| QTY*QD*1944*KH | Net Consumption Quantity (kwh) |
| MEA**PRQ*1944*KH***51 | TOU indicator |
| DTM*150*20120529 | Service Period Start |
| DTM*151*20120630 | Service Period End |
| QTY*87*311*KH | Net Generation Quantity (kwh) |
| MEA**PRQ*311*KH***51 | TOU indicator |
| DTM*150*20120427 | Service Period Start |
| DTM*151*20120529 | Service Period End |

| QTY*87*871*KH | Net Generation Quantity (kwh) |
|-----------------------|--|
| MEA**PRQ*871*KH***51 | TOU indicator |
| DTM*150*20120327 | Service Period Start |
| DTM*151*20120427 | Service Period End |
| QTY*QD*2166*KH | Net Consumption Quantity (kwh) |
| MEA**PRQ*2166*KH***51 | TOU indicator |
| DTM*150*20120227 | Service Period Start |
| DTM*151*20120327 | Service Period End |
| PTD*FG | Scheduling Determinants Loop |
| REF*BF*01 | Bill Cycle |
| REF*KY*ASUN | Special Meter Configuration |
| REF*LF*2 | Loss Factor (FE Only; optional others) |
| REF*LO*RS | Load Profile |
| REF*NH*RESNH | LDC Rate Code |
| REF*SV*SECONDARY | Service Voltage (FE Only; optional others) |
| QTY*KC*752*K1 | Peak Load Contribution |
| QTY*KZ*752*K1 | Network Service Peak Load |

| Historical Usage Summarized by Account - BPT*52*2012070112300001*20120701*DD | Transaction Set Purpose Code: 52, Response to Historical Inquiry |
|---|--|
| BF1 · 32 · 20120/0112300001 · 20120/01 · DD | Reference Identification: 2012070112300001, Transaction Date: 20120701, Report |
| | Type Code: DD , <i>Usage</i> |
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| PTD*SU | Summary Loop for kwh |
| QTY*QD*1944*KH | Billed usage (kwh) |
| MEA**PRQ*2150*KH***51 | Actual Consumption (kWh) |
| DTM*150*20120529 | Service Period Start |
| DTM*151*20120630 | Service Period End |
| QTY*QD*2011*KH | Billed usage (kwh) |
| MEA**PRQ*2243*KH***51 | Actual Consumption (kWh) |
| DTM*150*20120427 | Service Period Start |
| DTM*151*20120529 | Service Period End |
| QTY*QD*1871*KH | Billed usage (kwh) |
| MEA**PRQ*2087*KH***51 | Actual Consumption (kWh) |
| DTM*150*20120327 | Service Period Start |
| DTM*151*20120427 | Service Period End |
| QTY*QD*2166*KH | Billed usage (kwh) |
| MEA**PRQ*2180*KH***51 | Actual Consumption (kWh) |
| DTM*150*20120227 | Service Period Start |
| DTM*151*20120327 | Service Period End |
| PTD*FG | Scheduling Determinants Loop |
| REF*BF*01 | Bill Cycle |
| REF*NH*RESNH | LDC Rate Code |
| QTY*KC*752*K1 | Peak Load Contribution |
| QTY*KZ*752*K1 | Network Service Peak Load |

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

| BPT*52*201903140404550002229777*20190314*DD | Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 201903140404550002229777 , Transaction Date: 20190314 , Report Type Code: DD , <i>Usage</i> |
|---|--|
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| PTD*SU | Summary Loop for kwh |
| REF*6W*1 | Channel Number |
| QTY*KA*37.0000000*KH | Billed usage (kwh) |
| DTM*150*20180309 | Service Period Start |
| DTM*151*20180409 | Service Period End |
| OTY*OD*998.0000000*KH | Billed usage (kwh) |
| DTM*150*20180410 | Service Period Start |
| DTM*151*20180507 | Service Period End |
| OTY*OD*753.0000000*KH | Billed usage (kwh) |
| DTM*150*20180508 | Service Period Start |
| DTM*151*20180607 | Service Period End |
| OTY*OD*1052.0000000*KH | Billed usage (kwh) |
| DTM*150*20180608 | Service Period Start |
| DTM*151*20180709 | Service Period End |
| PTD*SU | Summary Loop for kwh |
| REF*6W*2 | Channel Number |
| OTY*9H*7.0000000*KH | Billed usage (kwh) |
| DTM*150*20180309 | Service Period Start |
| DTM*151*20180409 | Service Period End |
| OTY*87*98.0000000*KH | Billed usage (kwh) |
| DTM*150*20180410 | Service Period Start |
| DTM*151*20180507 | Service Period End |
| OTY*87*53.0000000*KH | Billed usage (kwh) |
| DTM*150*20180508 | Service Period Start |
| DTM*151*20180607 | Service Period End |
| OTY*87*105.0000000*KH | Billed usage (kwh) |
| DTM*150*20180608 | Service Period Start |
| DTM*151*20180709 | Service Period End |
| PTD*FG | Scheduling Determinants Loop |
| REF*BF*68 | Bill Cycle |
| REF*LO*RESNH | LDC Load Profile |
| REF*NH*ME-RSD | LDC Rate Class |
| REF*SV*Secondary, voltage unknown | Service Voltage |
| REF*LF*1.071800 | Loss Factor |
| QTY*KC*2.5369000*K1 | Peak Load Contribution |
| DTM*007****RD8*20180601-20190531 | Effective Date of Peak Load Contribution |
| QTY*KC*2.3475000*K1 | Peak Load Contribution |
| DTM*007****RD8*20190601-20200531 | Effective Date of Peak Load Contribution |
| QTY*KZ*3.3045000*K1 | Network Service Peak Load |
| DTM*007****RD8*20190601-20200531 | Effective Date of Network Service Peak Load |

Example: Pennsylvania Effective Dates for PLC/NSPL

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

| BPT*52*2012040112300001*20120401*DD | Transaction Set Purpose Code: 52 , <i>Response to Historical Inquiry</i> Reference Identification: 2012040112300001 , Transaction Date: 20120401 , Report Type Code: DD , <i>Usage</i> |
|-------------------------------------|--|
| N1*8S*LDC COMPANY*1*007909411 | LDC Company |
| N1*SJ*ESP COMPANY*9*007909422ESP1 | ESP Company |
| N1*8R*JANE DOE | Customer name |
| REF*11*8645835 | ESP Account Number |
| REF*12*519703123457 | LDC Account Number |
| REF*45*451105687500 | Old LDC Account Number |
| PTD*SU | Summary Loop for kwh |
| QTY*QD*1944*KH | Consumption Quantity (kwh) |
| DTM*150*20120529 | Service Period Start |
| DTM*151*20120630 | Service Period End |
| QTY*QD*311*KH | Consumption Quantity (kwh)) |
| DTM*150*20120427 | Service Period Start |
| DTM*151*20120529 | Service Period End |
| QTY*QD*871*KH | Consumption Quantity (kwh) |
| DTM*150*20120327 | Service Period Start |
| DTM*151*20120427 | Service Period End |
| QTY*QD*2166*KH | Consumption Quantity (kwh) |
| DTM*150*20120227 | Service Period Start |
| DTM*151*20120327 | Service Period End |
| PTD*FG | Scheduling Determinants Loop |
| REF*BF*01 | Bill Cycle |
| REF*LF*2 | Loss Factor (FE Only; optional others) |
| REF*KY*ASUN | Special Meter Configuration |
| REF*LO*RS | Load Profile |
| REF*NH*RESNH | LDC Rate Code |
| REF*SV*SECONDARY | Service Voltage (FE Only; optional others) |
| QTY*KC*752*K1 | Peak Load Contribution - CURRENT |
| DTM*007****RD8*20110601-20120531 | Effective Date of Peak Load Contribution |
| QTY*KC*787*K1 | Peak Load Contribution - FUTURE |
| DTM*007****RD8*20120601-20130531 | Effective Date of Peak Load Contribution |
| QTY*KZ*752*K1 | Network Service Peak Load |
| DTM*007****RD8*20120101-20121231 | Effective Date of Network Service Peak Load |