Virginia

Implementation Standard

For

Electronic Data Interchange

TRANSACTION SET

867

Product Transfer and Resale Report

Monthly Usage

Ver/Rel 004010

Summary of Changes

August 27, 2001 Version 2-1FINAL	Issue final version 2.1 for 1/1/2002 Open Access
November 30,2001	Changes to DTM*649. The DTM*649 is mandatory for bill-ready and optional for rate-ready.
January 30,2002	Added DTM03 & DTM04. Time and Time Codes must be used only if the provider conducts business in multiple states and time zones.
December 1, 2002 Version 2.2 Final	Issue final version 2.2 for 1/1/2003 CSP Consolidated Billing. Deleted references to MEA 02 and MEA 03 in Data Dictionary and examples. Also changed MEA*NP to "Not Used".
February 24, 2003 Version 2.2.1	Added note for BARC, CVEC, C-BEC, MEC, NNEC, SVEC, and SEC on un-metered service.
March 21, 2003	Approved Draft Version 2.2.1

Notes

PTD Loops Definition

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

Monthly Billed Summary Information (PTD01=BB): This loop is optional.

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

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

Metered Services Summary (PTD01=SU): Summing to the account level by kWh and kVARh. Data is obtained from the metering system. The PTD01=SU loop will NEVER be provided for kW or kVAR.

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

Unmetered Services.

Unmetered Services Information (PTD01 = BC) – This loop is used to convey the usage for any unmetered portion of an account.

Unmetered Services Summary (PTD01=BC): Total Consumption for all unmetered services at the account level. There may be multiple loops per account. Even though some of the consumption may be estimated, the consumption is reported as actual for unmetered services. Only the summary is required at this time for Unmetered Services.

BARC, CVEC, C-BEC, MEC, NNEC, SVEC, and SEC: un-metered accounts are not available to CPSs.

Cancellations

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

Restatements	• In order to restate usage for a period, the metering party must first completely cancel all usage for that period; then send the full set of restatement transactions. • If you receive a cancellation, you will not necessarily receive a restatement (i.e. if the data was sent to you in error in the first place). • The "from" and "to" dates on the restatement transactions do not have to match the corresponding original or cancel transactions for the same period. • Restatements across multiple cycles may match original from and to dates or may cross bill cycles. • An 867 cancel can be followed by an 867 original the next month. The metering period would include the metering period from the cancelled and the current usage.
LDC Definition:	The term LDC (Local Distribution Company) in this document refers to the utility.
CSP Definition:	The terms CSP (Competitive Service Provider) and ESP (Energy Service Provider) are currently interchangeable.

How to Use the Implementation Standard

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

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

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

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

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

One or more examples.

Data Element Summary

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

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

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

This column shows the X12 attributes for each data element. Please refer to Data Dictionary for individual state rules.

M = Mandatory, O= Optional, X = Conditional

AN = Alphanumeric, N# = Decimal value, ID = Identification, R = Real

867 Product Transfer and Resale Report
Monthly Usage
X12 Structure

Functional Group ID=PT

Heading:

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

Detail:

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

Summary:

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

Data Dictionary for 867 Monthly Usage

867 Monthly Usage					
Appl Field	***Field Name***	***Description***	***EDI Segment***	***Related EDI Qualifier***	***Data Type***
Header Information					
1	Purpose Code	Purpose of transaction set. **00** - Original **01** - Cancellation - Cancels an entire Usage	BPT01		X(2)
2	Transaction Reference Number (Reference Identification)	Unique Number identifying this transaction assigned by the sender of the transaction. This number should be unique over all time.	BPT02	BPT01	X (30)
3	System Date	Transaction Creation Date -Date that the data was processed by the sender's application system.	BPT03	BPT01	9(8)
4	Report Type Code	**DD** - Usage **KJ** - Change Proposal Data -* Meter Changeout when Meter Agent Changes - Monthly Usage (tells the receiver that this is a partial usage statement. The billing agent must sum the KJ usage and the DD usage to calculate the bill.)	BPT04	BPT01	X(2)
5	Final Indicator Action Code	Indicates if this is a final reading for that particular ESP (e.g., customer moves, customer switches, etc.).	BPT07 = **F**	BPT01	X(1)
6	Transaction Reference Number	Transaction Reference Number echoed from BPT02 of the Original Transaction	BPT09	BPT01	X(30)
7	Date/ Time Qualifier	Transaction Creation Time	DTM01 = **649**	BPT01	X(3)
8	Document Due (Date)	The last date/time that information will be accepted by the billing party for processing the bill	DTM02	DTM01= **649**	9(8)
9	Document Due (Time)	The last date/time that information will be accepted by the billing party for processing the bill. **Condition:** Time code must be sent if time is sent if LDC conducts business in multiple states and time zones. The time code may be optionally sent if the LDC conducts business in only one time zone.	DTM03	DTM01 = **649**	9(6)
10	Time Code	Code identifying the time (i.e. Time Zone) **Condition:** Time code must be sent if time is sent if LDC conducts business in multiple states and time zones. The time zone may be optionally sent if the LDC conducts business in only one time zone.	DTM04	DTM01 = **649**	X(2)
11	Entity Identifier Code	Code identifying an organizational entity. This code is the LDC code.	N101 = **8S**	N1:	X(3)
12	LDCName	LDC Company Name	N102	N1: N101 = **8S**	X(60)
13	Identification Code Qualifier	LDC code designating the system/method of code structure used for Identification Code.	N103 =**1** or **9**	N1: N101 = **8S**	X(2)

14	LDC Duns (Identification Code)	LDC DUNS Number or DUNS+4 Number	N104	N1: N101 = **8S** N103 = **1** or **9**	X(13)
15	Entity Identifier Code	Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops. **40** – Receiver **41** – Submitter	N106 = **40** or **41**	N1: N101 = **8S**	X(2)
16	Entity Identifier Code	Code identifying an organizational entity. This is the ESP's code.	N101 = **SJ**	N1:	X(3)
17	ESP Name	ESP's Company Name	N102	N1: N101 = **SJ**	X(60)
18	Identification Code Qualifier	ESP's code designating the system/method of code structure used for Identification Code.	N0103 = **1** or **9**	N1: N101 = **SJ**	X(2)
19	ESP Duns (Identification Code)	ESP's DUNS Number or DUNS+4 Number	N104	N1: N101 = **SJ** N103 = **1** or **9**	X(13)
20	Entity Identifier Code	Identifies whether the ESP is the sender or the receiver of this transaction	N106 **= 40** or **41**	N1: N101 = **SJ**	X(2)
21	Entity Identifier Code	Code used to identify the customer associated with the LDC service account.	**N101 = 8R**	N1:	X(3)
22	Customer Name	Customer Name	N102	N1: N101 = **8R**	X(60)
23	Reference Identification Qualifier	Code qualifying the Reference Identification. ESP-assigned account number for the end use customer.	REF01 = **11**	N1: N101*8R Loop REF01 = **11**	X(3)
24	ESP Account Number (Reference Identification)	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier. ESP Customer Account Number	REF02	N1: N101 = **8R** and Loop REF01 = **11**	X(30)
25	Reference Identification Qualifier	Code qualifying the Reference Identification. LDC-assigned account number for the end use customer.	REF01 = **12**	N1: N101 = **8R**	X(3)
26	LDC Account Number (Reference Identification)	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier. LDC Customer Account Number	REF02	N1: N101 = **8R** and Loop REF01 = **12**	X(30)
27	Reference Identification Qualifier	Code qualifying the Reference Identification. SDID - Service Delivery Identification used only by AEP.	REF01 = **Q5**	N1: N101 = **8R**	X(3)
28	Description	A free form description to clarify the related data elements and their content. Only AEP assigned Service Delivery Identification number.	REF03	N1: N101 = **8R** REF01 = **Q5**	X(80)
29	Reference Identification Qualifier	Code qualifying the Reference Identification. LDC-assigned account number for the end use customer.	REF01 = **45**	N1: N101 = **8R**	X(3)
30	Old Account Number (Reference Identification)	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier. Previous LDC Customer Account Number	REF02	N1: N101= **8R** Loop REF01 = **45**	X(30)
31	Reference Identification Qualifier	Code qualifying the Reference Identification. Billing Type	REF01 = **BLT**	N1: N101 = **8R**	X(3)

32	Billing Type (Reference Identification)	Indicated if the bill is consolidated by the LDC or ESP, or whether each part will render their own bill. **LDC** - LDC consolidated Billing. **ESP** – ESP consolidated Billing. **DUAL** – Dual bills.	REF02	N1: N101= 8R LIN: REF01 = **BLT**	X(4)
33	Reference Identification Qualifier	Code qualifying the Reference Identification. Billing Calculation Method	REF01 = PC	N1: N101 **= 8R**	X(3)
34	Billing Calculation Method (Reference Identification)	Indicates party to calculate the charges on the bill. **LDC** - LDC calculates bill **DUAL** - Each calculate their portion	REF02	N1: N101 = **8R** and LIN: REF01= **PC**	X(4)
Please refer to General Notes for details about the use of the PTD loop combinations.					
Monthly Billed Summary - Loop is Optional.					
This information is obtained from the billing system to reflect billing data for this account at the unit of measure level.					
35	Product Transfer Type Code	Monthly Billed Summary	PTD01= BB	PTD:	X(2)
36	Date/Time Qualifier	Specifies type of date/time or both date and time	DTM01 = **150**	PTD:	X(2)
37	Service Period Start Date	Start date of the period for which the readings are provided	DTM02 =**150**	PTM: DTM01 = **150**	9(8)
38	Date/Time Qualifier	Specifies type of date/time or both date and time	DTM01 = **151**	PTD: DTM01 = **151**	X(2)
39	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = **151**	9(8)
40	Quantity Qualifier	Represents that the quantity was billed: **D1** – Billed	QTY01 = **D1**	PTD: QTY:	X(2)
41	Quantity (Delivered - Billed kWh)	This data is taken from the LDC billing system and reflects the kWh amount on which the customer was billed.	QTY02	PTD: QTY: QTY01= **D1**	-9(10).9(4)
42	Quantity Delivered Unit of Measurement (Unit of Basis for Measurement Code)	Indicates unit of measurement for quantity of consumption delivered during service period. **KH** – Kilowatt Hours	QTY03	PTD: QTY: QTY01= **D1**	X(2)
43	Quantity Qualifier	Represents that the quantity was billed: **D1** – Billed	QTY01 = **D1**	PTD: QTY:	X(2)
44	Quantity (Delivered - Derived or Billed Demand)	Demand for which the customer was actually billed at account level only. Derived or billed demand is different from measured demand because the result is based on contract demand or rate minimum demand.	QTY02	PTD: QTY: QTY01= **D1**	-9(10).9(4)
45	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement Code)	Indicates unit of measurement for quantity of consumption delivered during service period. **K1** – Demand (kW)	QTY03	PTD: QTY: QTY01= **D1**	X(2)
46	Quantity Qualifier	Represents whether the quantity is actual or estimated: **QD** = Quantity Delivered (Actual) **KA** = Estimated	QTY01	PTD: QTY:	X(2)

47	Quantity (Delivered - Measured or Registered Demand)	Reflects what the meter actual shows (including all factors except Power Factor) and is provided at the account level only.	QTY02	PTD: QTY: QTY01	- 9(10).9(4)
48	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement code)	Indicates unit of measurement for quantity of consumption delivered during service period. **K1** – Demand (kW)	QTY03	PTD: QTY: QTY01	X(2)
Metered Services Summary - Loop required if there are metered services on the account					
49	Product Transfer Type Code	Account Services Summary Total for the service for the account. This can include the reporting of unmetered.	PTD01= SU	PTD:	X(2)
50	Date/Time Qualifier	Specifies type of date/time or both date and time	DTM01 = **150**	PTD:	X(2)
51	Service Period Start Date	Start date of the period for which the readings are provided	DTM02	PTM: DTM01 = **150**	9(8)
52	Date/Time Qualifier	Specifies type of date/time or both date and time	DTM01 = **151**	PTD: DTM01 = **151**	X(2)
53	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = **151**	9(8)
54	Quantity Qualifier	Represents whether the quantity is actual or estimated: **QD** = Quantity Delivered (Actual) **KA** = Estimated	QTY01	PTD: QTY:	X(2)
55	Quantity (Delivered)	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings multiplied by various factors, excluding Power Factor.	QTY02	QTY01	- 9(10).9(4)
56	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement code)	Indicates unit of measurement for quantity of consumption delivered during service period. **K3** - Kilovolt Amperes (kVARh) **KH** – Kilowatt Hours (kWh) **KQ** – Kilowatt Q Hour Only valid for KWH and KVARH.	QTY03	PTD: QTY: QTY01	X(2)
Metered Services Detail - Loop Required if there are metered services on the account					
57	Product Transfer Type Code	Metered Services Detail	PTD01= PM	PTD:	X(2)
58	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = **150**	PTD:	X(2)
59	Service Period Start Date	Start date of the service period or start date of the changed in meter.	DTM02	DTM01 = **150**	9(8)
60	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = **151**	PTD: DTM01 = **151**	X(2)
61	Service Period End Date	End date of the service period or end date of the changed out meter.	DTM02	DTM01 = **151**	9(8)
62	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = **541**	PTD:	X(3)
63	Meter Change Out Date	Used in conjunction with either the Service Period Start Date or the Service Period End Date to indicate when a meter has been replaced. Separate PTD loops must be created for each period and meter.	DTM02	PTD: DTM01 = **514**	9(8)
64	Reference Identification Qualifier	Code qualifying the Reference Identification. Meter Number	REF01 = **MG**	PTD:	X(3)

65	Meter Number (Reference Identification)	Serial number of this specific meter (may have multiple meters).	REF02	PTD: REF01 = **MG**	X(30)
66	Reference Identification Qualifier	Code qualifying the Reference Identification. LDC Rate Code	REF01 = **NH**	PTD:	X(3)
67	LDC Rate Code (Reference Identification)	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)
68	Reference Identification Qualifier	Code qualifying the Reference Identification. LDC Rate Subclass code	REF01 = **PR**	PTD:	X(3)
69	LDC Rate Subclass Code (Reference Identification)	Provides further classification of a rate.	REF02	PTD: REF01= **PR**	X(30)
70	Reference Identification Qualifier	Code qualifying the Reference Identification. Meter Role	REF01 = **JH**	PTD:	X(3)
71	Meter Role (Reference Identification)	Effect of consumption on summarized total. **S** = Subtractive (consumption subtracted from summarized total). **A** = Additive (consumption contributed to summarized total - do nothing). **I** = Ignore (consumption did not contribute to summarized total - do nothing).	REF02	PTD: REF01 = **JH**	X(30)
72	Reference Identification Qualifier	Code qualifying the Reference Identification. Rate Card Number (Number of Dials / Digits and related decimal positions)	REF01 = IX	PTD:	X(3)
73	Number of Dials / Digits and related decimal positions (Reference Identification)	Needed to determine usage if meter reading rolls over during the billing period. Number of dials on the meter displayed as the number of dials to the left of the decimal, a decimal point, and number of dials to the right of the decimal.	REF02	PTD: REF01 = **IX**	9.9
74	Description	Used to clarify related data elements and their content.	REF03	PTD: REF01 = IX	X(80)
75	Reference Identification Qualifier	Code identifying Billing Data Types and Interval Frequencies	REF01 = MT	PTD:	X(3)
76	Meter Type (Reference Identification)	Code indicating type of consumption measured & interval at which measurements are taken.	REF02	PTD: REF01 = MT	X(5)
77	Quantity Qualifier	Represents whether the quantity is actual or estimated: **QD** = Quantity Delivered (Actual) **KA** = Estimated	QTY01	PTD: QTY:	X(2)
78	Quantity (Delivered)	Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors, excluding Power Factor.	QTY02	PTD: QTY: QTY01	9(10).9(4)
79	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement code)	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03	PTD: QTY: QTY01	X(2)

80	Measurement Reference ID Code	Code identifying category to which measurement applies. **AA** - Meter reading-beginning/ending actual **AE** - Meter reading-beginning actual/ending estimated **AF** - Actual Total **BO** - Meter reading as billed **ES** – Meter reading-beginning estimated/ending **EE** – Meter reading-beginning estimated/ending estimated	MEA01	PTD: QTY:	X(2)
81	Consumption (Measurement Value)	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	PTD: QTY: MEA02 = **PRQ**	9(9).9(4)
82	Unit of Measure (Unit or Basis for Measurement Code)	Unit of measure for readings.	MEA04	PTD: QTY: MEA02 = **PRQ**	X(2)
83	Beginning Reading (Range Minimum)	Value specifying beginning reading for the metering period. Factors have not been applied to this value.	MEA05	PTD: QTY: MEA02 = **PRQ**	9(8).9(4)
84	Ending/Single Reading (Range Maximum)	The ending reading or single reading for metering period. Factors have not been applied to this value.	MEA06	PTD: QTY: MEA02 = **PRQ**	9(8).9(4)
85	Measurement Significance Code	Code used to benchmark, qualify, or further define a measurement value.	MEA07	PTD: QTY: MEA02 = **PRQ**	X(2)
86	Measurement Significance Code	Multiplier	MEA07	PTD: QTY:	X(2)
87	Meter Multiplier (Measurement Value)	Meter Constant - used to represent how many units are reflected by one dial or digit increment.	MEA03	PTD: QTY: MEA02 = **MU**	9(9).9(4)
88	Measurement Qualifier	Power Factor	MEA02 = **ZA**	PTD: QTY:	X(2)
89	Power Factor (Measurement Value)	Relationship between watts and volt - amperes necessary to supply electric load	MEA03	PTD: QTY: MEA02 = **ZA**	9(9).9(4)
90	Measurement Qualifier	Core Loss	MEA02 = **CO**	PTD: QTY:	X(2)
91	Transformer Loss Multiplier (Measurement Value)	When a customer owns a transformer and the transformer loss is not measured by the meter.	MEA03	PTD: QTY: MEA02 = **CO**	9(9).9(4)
Unmetered Services Summary - Loop required if there are unmetered services on the account					
92	Product Transfer Type Code	Unmetered Services Summary	PTD01= **BC**	**PTD:**	X(2)
93	Date/Time Qualifier	Specifies type of date/time or both date and time	DTM01 = **150**	PTD:	X(2)
94	Service Period Start Date	Start date of the period for which the readings are provided.	DTM02	DTM01 = **150**	9(8)
95	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = **151**	PTD:	X(2)
96	Service Period End Date	End date of the period for which the readings are provided .	DTM02	DTM01 = **151**	9(8)

97	Quantity Qualifier	Represents that the quantity is actual: **QD** =Quantity Delivered (Actual)	QTY01 = **QD**	PTD: QTY:	X(2)
98	Quantity (Delivered)	Represents quantity of consumption delivered for service period.	QTY02	PTD: QTY: QTY01= **QD**	9(10).9(4)
99	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement Code)	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03	PTD: QTY: QTY01= **QD**	X(2)
	Unmetered Services Summary - Loop required if there are unmetered services on the account				
100	Product Transfer Type Code	Unmetered Services Detail	PTD01= BD		X(2)
101	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = **150**	PTD:	X(3)
102	Service Period Start Date	Start date of the period for which the readings are provided .	DTM02	DTM01 = **150**	9(8)
103	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = **151**	PTD:	X(2)
104	Service Period End Date	End date of the period for which the readings are provided .	DTM02	DTM01 = **151**	9(8)
105	Reference Identification Qualifier	Code identifying LDC Defined Unmetered Service Type.	REF01 = **PRT**	PTD	X(3)
106	LDC Defined Unmetered Service Type (Reference Identification)	LDC Defined Unmetered Service Type. A code that defines the type of unmetered service. These codes will be defined on the LDC Web Sites.	REF02	PTD: REF01 = **PRT**	X(30)
107	Quantity Qualifier	Represents that the quantity is actual: **QD** =Quantity Delivered (Actual)	QTY01 = **QD**	PTD: QTY:	X(2)
108	Quantity (Delivered)	Represents quantity of consumption delivered for service period.	QTY02	PTD: QTY: QTY01= **QD**	9(10).9(4)
109	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement Code)	Indicates unit of measurement for quantity of consumption delivered during service period.	QTY03	PTD: QTY: QTY01= **QD**	X(2)
110	(Quantity) Multiplier	This will represent the number of unmetered devices for each Unmetered Service type			

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:	
VA Use:	Required
Example:	ST*867*000000001

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**ST01**	**143**	**Transaction Set Identifier Code** Code uniquely identifying a Transaction Set	**M ID 3/3**
			867 Product Transfer and Resale Report	
Must Use	**ST02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**

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

VA Use:	Required.
Examples:	BPT*00*199902010001*19990131*DD***F* BPT*01*199902020001*19990131*DD****

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**BPT01**	**353**	**Transaction Set Purpose Code** Code identifying purpose of transaction set 00 Original Conveys original readings for the account being reported. 01 Cancellation Indicates that the readings previously reported for the account are to be ignored.	**M ID 2/2**
Must Use	**BPT02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A unique transaction identification number assigned by the originator of this transaction. This number must be unique over all time.	**O AN 1/30**
Must Use	**BPT03**	**373**	**Date** Date expressed as CCYYMMDD Transaction Creation Date – the date that the data was processed by the application system.	**M DT 8/8**
Must Use	**BPT04**	**755**	**Report Type Code** Code indicating the title or contents of a document, report or supporting item DD Distributor Inventory Report Usage KJ Change Proposal Data Meter Changeout when Meter Agent Changes – Monthly Usage For monthly metered customers only (not interval metered customers)	**O ID 2/2**
Conditional	**BPT07**	**306**	**Action Code** Code indicating type of action F Final Indicates Final Usage for specific ESP. Code to indicate this is the final usage data being sent for this customer. Either the customer account is final with the LDC or the customer switched to a new ESP.	**O ID 1/2**
Conditional	**BPT09**	**127**	**Reference Identification**	**O AN 1/30**

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

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

Segment: **DTM** **Date/Time Reference**
Position: 050
Loop:
Level: Heading
Usage: Optional
Max Use: 10
Purpose: To specify pertinent dates and times
Syntax Notes: **1** At least one of DTM02, DTM03 or DTM05 is required.
2 If DTM04 is present, then DTM03 is required.
3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:
Comments:

Notes:	Required for LDC Consolidated Bill Ready Billing where the LDC sends an 867 to the CSP who calculates their own portion of the bill and sends the 810 to the LDC. Not provided on cancel transaction.
VA Use:	Required for LDC Consolidated Bill Ready, Optional for LDC Consolidated Rate Ready and CSP Consolidated Billing. Time and Time Codes must be used only if the provider conducts business in multiple states and time zones. Not used for Dual Billing.
Examples:	DTM*649*20020715*17000000*ET (bill ready) DTM*649*2002150000 (rate ready)

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time	**M ID 3/3**
			649 Document Due	
			The date that the non-billing party must provide the 810 transaction back to the billing party.	
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X DT 8/8**
Conditional	**DTM03**	**337**	**Time** Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	**X TM 4/8**
			Recommended format: HHMMSS	
			Condition: Time code must be sent if time is sent if LDC conducts business in multiple states and time zones. The time code may be optionally sent if the LDC conducts business in only one time zone.	
Conditional	**DTM04**	**623**	**Time Code** Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or – and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and – are substituted by P and M in the codes that follow.	**O ID 2/2**
			Condition: Time code must be sent if time is sent if LDC conducts business in multiple states and time zones. The time zone may be optionally sent if the LDC conducts business in only one time zone.	
			ED Eastern Daylight	
			ES Eastern Standard	
			ET Eastern Time	
			UT Universal Time Coordinate	

Segment: **MEA** **Measurements**
Position: 075
Loop:
Level: Heading
Usage: Optional
Max Use: 20
Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights
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.

VA Use:	Not Used
Example:	MEA**NP*.66667

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**MEA02**	**738**	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	**O ID 1/3**
			NP Percent of Specified Percent Participation Indicates the percentage of the total load that is supplied by the ESP. This is the multiplication of two fields that are on the 814 transaction, AMT*7N (Participating Interest) and AMT*QY (Qualified/Eligible Load).	
Must Use	**MEA03**	**739**	**Measurement Value** The value of the measurement The whole number "1" represents 100 percent. Decimal numbers less than "1" represent percentages from 1 percent to 99 percent.	**X R 1/20**

Segment: **N1** **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.

VA Use: Required

Three N1 segments will be used in Virginia, where N101 = 8S, SJ, and 8R. The (end-use) Customer Account Number for the ESP and the LDC, the Service Delivery Identification, (SDID) and the LDC's previous Customer Account Number, if applicable, are to be placed in REF segments following the N101=8R segment, with REF01 = 11, 12, Q5 and 45, respectively.

Example: N1*8S*LDC COMPANY*1*007909411**40

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**N101**	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual	**M ID 2/3**
			8S Consumer Service Provider (CSP)	
			LDC	
Must Use	**N102**	**93**	**Name** Free-form name	**X AN 1/60**
			LDC Company Name	
Must Use	**N103**	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67)	**X ID 1/2**
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
Must Use	**N104**	**67**	**Identification Code** Code identifying a party or other code	**X AN 2/80**
			LDC D-U-N-S Number or D-U-N-S+4 Number	
Optional	**N106**	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual	**O ID 2/3**
			Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops.	
			40 Receiver	
			Entity to accept transmission	
			41 Submitter	
			Entity transmitting transaction set	

Segment: **N1** **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.

VA Use: Required

Three N1 segments will be used in Virginia, where N101 = 8S, SJ, and 8R. The (end-use) Customer Account Number for the ESP and the LDC, the Service Delivery Identification (SDID), and the LDC's previous Customer Account Number, if applicable, are to be placed in REF segments following the N101=8R segment, with REF01 = 11, 12, Q5 and 45, respectively.

Example: N1*SJ*ESP COMPANY*9*007909422ESP1

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**N101**	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual	**M**	**ID 2/3**
			SJ Service Provider ESP		
Must Use	**N102**	**93**	**Name** Free-form name	**X**	**AN 1/60**
			ESP Company Name		
Must Use	**N103**	**66**	**Identification Code Qualifier** Code designating the system/method of code structure used for Identification Code (67)	**X**	**ID 1/2**
			1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix		
Must Use	**N104**	**67**	**Identification Code** Code identifying a party or other code	**X**	**AN 2/80**
			ESP D-U-N-S Number or D-U-N-S+4 Number		
Optional	**N106**	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual	**O**	**ID 2/3**
			Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops.		
			40 Receiver Entity to accept transmission		
			41 Submitter Entity transmitting transaction set		

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

Notes:	Please note that while you may place your N1 segments in any order, the REF segments that follow must be contained within the N1*8R loop.
VA Use:	Required Three N1 segments will be used in Virginia, where N101 = 8S, SJ, and 8R. The (end-use) Customer Account Number for the ESP and the LDC, the Service Delivery Identification, and the LDC's previous Customer Account Number, if applicable, are to be placed in REF segments following the N101=8R segment, with REF01 = 11, 12, Q5 and 45, respectively.
Example:	N1*8R*CUSTOMER NAME

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**N101**	**98**	**Entity Identifier Code** Code identifying an organizational entity, a physical location, property or an individual 8R Consumer Service Provider (CSP) Customer End Use Customer	**M ID 2/3**
Must Use	**N102**	**93**	**Name** Free-form name Customer Name	**X AN 1/60**

Segment:	**REF** **Reference Identification**
Position:	120
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	**1** At least one of REF02 or REF03 is required. **2** If either C04003 or C04004 is present, then the other is required. **3** If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.
Comments:	
VA Use:	Required if it was previously provided to the LDC.
Example:	REF*11*1394959

Data Element Summary

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

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

VA Use:	Required Not used by AEP.
Example:	REF*12*1239485790

Data Element Summary

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

Segment: **REF** **Reference Identification**
Position: 120
Loop: N1
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes: **1** At least one of REF02 or REF03 is required.
2 If either C04003 or C04004 is present, then the other is required.
3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes: **1** REF04 contains data relating to the value cited in REF02.
Comments:
Notes: SDID numbers will only contain uppercase letters (A to Z) and Digits (0 - 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and leading and trailing zeros that are part of the SDID number must be present.
VA Use: Required if customer is in AEP service territory
Example: REF*Q5**987654

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M**	**ID 2/3**
			Q5 Property Control Number AEP assigned service delivery identification number		
Must Use	**REF03**	**352**	**Description** A free form description to clarify the related data elements and their content	**X**	**AN 1/80**
			AEP assigned service delivery identification number		

Segment:	**REF** **Reference Identification**
Position:	120
Loop:	N1
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	**1** At least one of REF02 or REF03 is required. **2** If either C04003 or C04004 is present, then the other is required. **3** If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.
Comments:	
VA Use:	Optional: Recommended if account number has changed within the last 60 days. **Note:** Will use old LDC Account Number (as optional) for Utilities that have built in intelligence in their Account Numbers.
Example:	REF*45*939581900

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification 45 Old Account Number LDC's previous account number for the end use customer.	**M ID 2/3**
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

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

VA Use:	Required
Example:	REF*BLT*LDC

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M ID 2/3**
			BLT Billing Type Identifies whether the bill is consolidated by the LDC or ESP, or whether each party will render their own bill.	
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**
			LDC The LDC bills the customer ESP The ESP bills the customer DUAL Each party bills the customer for their portion	

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

VA Use:	Required
Example:	REF*PC*LDC

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M ID 2/3**
			PC Production Code Identifies the party that is to calculate the charges on the bill.	
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**
			LDC The LDC calculates the charges on the bill DUAL Each party calculates its own charges.	

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

Segment:	**PTD** **Product Transfer and Resale Detail**
Position:	010
Loop:	PTD
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	**1** If either PTD02 or PTD03 is present, then the other is required. **2** If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	PTD Loops may be sent in any order.
VA Use:	Optional.
Example:	PTD*BB

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**PTD01**	**521**	**Product Transfer Type Code** Code identifying the type of product transfer	**M ID 2/2**
			BB Demand Information Only Monthly Billed Summary Total tariff-based charges (billing system data); distinguished from meter or register charges.	

Note:

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

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

Notes:	This date reflects the start of the range for this meter for this billing period.
VA USE:	Required
Example:	DTM*150*19990101

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 150 Service Period Start	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

Notes:	This date reflects the end of the range for this meter for this billing period.
VA Use:	Required
Example:	DTM*151*19990131

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 151 Service Period End	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

Notes:	Billed kWh
VA Use:	Required
Example:	QTY*D1*22348*KH

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity		**M**	**ID 2/2**
			D1	Billed Used when Quantity in QTY02 is a "Billed" quantity.		
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity		**X**	**R 1/15**
Must Use	**QTY03**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		**M**	**ID 2/2**
			KH	Kilowatt Hour (kWh) Billed Kilowatt Hours as shown on the customer's bill. May or may not be the same as measured kilowatt hours. Includes Metered and Unmetered services.		

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:	Billed Demand
VA Use:	Required if account measures Demand (kW). This must be sent even if Billed (derived) demand is equal to measured demand.
Example:	QTY*D1*14*K1

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity		**M**	**ID 2/2**
			D1	Billed Used when Quantity in QTY02 is a "Billed" quantity.		
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity		**X**	**R 1/15**
Must Use	**QTY03**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		**M**	**ID 2/2**
			K1	Kilowatt Demand (kW) Represents potential power load measured at predetermined intervals.		

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:	Measured Demand
VA Use:	Required if account measures Demand (kW)
Example:	QTY*QD*14*K1

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity		**M**	**ID 2/2**
			KA	Estimated Quantity shown is an estimated quantity		
			QD	Quantity Delivered Used when Quantity in QTY02 is Actual		
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity		**X**	**R 1/15**
Must Use	**QTY03**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		**M**	**ID 2/2**
			K1	Kilowatt Demand (kW) Represents potential power load measured at predetermined intervals.		

Segment:	**PTD** **Product Transfer and Resale Detail**
Position:	010
Loop:	PTD
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	**1** If either PTD02 or PTD03 is present, then the other is required. **2** If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	PTD Loops may be sent in any order.
VA Use:	Optional if this is a metered account that measures kWh, kQh, or kVARh. Accounts that have multiple meters or registers require multiple PTD loops: the total consumption from multiple meters may be summarized in another PTD loop, qualified by SU.
Example:	PTD*SU

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**PTD01**	**521**	**Product Transfer Type Code** Code identifying the type of product transfer	**M ID 2/2**
			SU Summary Account Service Summary Total for the service for the account. This can include the reporting of unmetered service.	

Note:

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

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

Notes:	This date reflects the start for the range for this meter for this billing period.
VA Use:	Required if account has metered services
Example:	DTM*150*1999010

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 150 Service Period Start	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

Notes:	This date reflects the end of the range for this meter period.
VA Use:	Required if account has metered services.
Example:	DTM*151*19990131

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 151 Service Period End	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

Notes:	There will be one QTY loop for each of the QTY03 Units of Measurement listed below that are e measured on this account.
VA Use:	Required if account has metered services
Example:	QTY*QD*22348*KH

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity		**M**	**ID 2/2**
			KA	Estimated Quantity shown is an estimated quantity		
			QD	Quantity Delivered Used when Quantity in QTY02 is Actual		
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity		**X**	**R 1/15**
Must Use	**QTY03**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		**M**	**ID 2/2**
			K3	Kilovolt Amperes Reactive Hour (kVARh) Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters		
			KH	Kilowatt Hour (kWh)		
			KQ	Kilopascal Represents pressure - Kilowatt Q Hour (kQh)		

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

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**PTD01**	**521**	**Product Transfer Type Code** Code identifying the type of product transfer PM Physical Meter Information	**M ID 2/2**

Note:

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

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

Notes:	This date reflects the beginning of the date range for this meter for this billing period. This specific PTD loop is required if there are metered services on the account.
VA Use:	Required, unless a "DTM*514" is substituted for this code.
Example:	DTM*150*1999010

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 150 Service Period Start	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

Notes:	This date reflects the end of the date range for this meter for this billing period. This specific PTD loop is required if there are metered services on the account.
VA Use:	Required, unless a "DTM*514" is substituted for this code.
Example:	DTM*151*19990131

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 151 Service Period End	**M ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X DT 8/8**

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

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

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time		**M**	**ID 3/3**
			514	Transferred Exchanged meter read date		
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD		**X**	**DT 8/8**

Segment:	**REF** **Reference Identification**
Position:	030
Loop:	PTD
Level:	Detail
Usage:	Optional
Max Use:	20
Purpose:	To specify identifying information
Syntax Notes:	**1** At least one of REF02 or REF03 is required. **2** If either C04003 or C04004 is present, then the other is required. **3** If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	**1** REF04 contains data relating to the value cited in REF02.
Comments:	
VA Use:	Required if this is a metered account and the meter is on the account at the end of the period. For some utilities, they may not be able to provide the actual meter number for a meter that has been changed out during the month. In that case, the REF*MG will not be sent.
Example:	REF*MG*2222277S

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification MG Meter Number	**M ID 2/3**
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

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

VA Use:	Optional
Example:	REF*NH*GS1

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification NH Rate Card Number LDC Rate Code	**M ID 2/3**
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

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

Notes:	This iteration of the REF segment is used for meter level information.
VA Use:	Conditional: If maintained by utility, must be sent for each meter loop that is used for billing purposes.
Example:	REF*PR*123

Data Element Summary

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

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

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

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification		**M ID 2/3**
			JH	Tag Meter Role	
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		**X AN 1/30**
			S	Subtractive - this consumption needs to be subtracted from the summarized total.	
			A	Additive - this consumption contributed to the summarized total (do nothing).	
			I	Ignore - this consumption did not contribute to the summarized total (do nothing).	

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

VA Use:	Required for meters with dials
Examples:	REF*IX*6.0 REF*IX*5.1 REF*IX*4.2

Data Element Summary

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

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

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

VA Use:	Optional
Example:	REF*MT*KHMON

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification	**M ID 2/3**
			MT Meter Ticket Number Meter Type Billing Data Types and Interval Frequencies	
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	**X AN 1/30**

When REF01 is MT, the meter type is expressed as a five-character field. The first two characters are the type of consumption, the last three characters are the metering interval. Valid values can be a combination of the following values:

Type of Consumption

K1	Kilowatt Demand
K2	Kilovolt Amperes Reactive Demand
K3	Kilovolt Amperes Reactive Hour
K4	Kilovolt Amperes
K5	Kilovolt Amperes Reactive
KH	Kilowatt Hour
KQ	Kilowatt Q Hour
T9	Thousand Kilowatt Hours

Metering Interval

Nnn	Number of minutes from 001 to 999
ANN	Annual
BIA	Bi-annual
BIM	Bi-monthly
DAY	Daily
MON	Monthly
QTR	Quarterly

For Example:

KHMON	Kilowatt Hours Per Month
K1015	Kilowatt Demand per 15 minute interval

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

Notes:	There will be one QTY loop for each of the QTY03 Units of Measurement listed below for each meter that is measured on this account. If there are 2 meters on the account, and one measures kWh and kW, and the other measures just kWh, there will be 3 PTD01=PM loops. If a meter measures total usage, as well as on peak and off peak, there will be three QTY loops sent within one PTD01=PM loop. The MEA segment that follows each QTY will specify which time of use the QTY applies to.
VA Use:	Required if there are metered services on the account.
Example:	QTY*QD*22348*KH QTY*QD*14*K1

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity		**M**	**ID 2/2**
			KA	Estimated Quantity shown is an estimated quantity		
			QD	Quantity Delivered Used when Quantity in QTY02 is Actual		
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity		**X**	**R 1/15**
Must Use	**QTY03**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		**M**	**ID 2/2**
			K1	Kilowatt Demand (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) Measure of electrical power		
			KH	Kilowatt Hour (kWh)		
			KQ	Kilopascal Represents pressure - Kilowatt Q Hour (kQh)		

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
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. If meter measures multiple determinants, you need to send multiple QTY loops, one for each unit of measurement.
VA Use:	Required (optional on a cancellation)
Examples:	MEA*AA*PRQ*22348*KH**51 MEA*AF*PRQ*14*K1**51

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**MEA01**	**737**	**Measurement Reference ID Code** Code identifying the broad category to which a measurement applies	**O ID 2/2**
			AA Meter reading-beginning actual/ending actual AE Meter reading-beginning actual/ending estimated AF Actual Total Recommended for Demand Readings BO Meter Reading as Billed Used when billing charges are based on contractual agreements or pre-established usage and not on actual usage EA Meter reading-beginning estimated/ending actual EE Meter reading-beginning estimated/ending estimated	
Must Use	**MEA02**	**738**	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	**O ID 1/3**
			PRQ Product Reportable Quantity Consumption	
Must Use	**MEA03**	**739**	**Measurement Value** The value of the measurement 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.	**X R 1/20**
Must Use	**MEA04**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	**M ID 2/2**
			K1 Kilowatt Demand	

				Represents potential power load measured at predetermined intervals		
			K2	Kilovolt Amperes Reactive Demand		
				Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter		
			K3	Kilovolt Amperes Reactive Hour		
				Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters		
			K4	Kilovolt Amperes (kVA)		
				Measure of electrical power		
			K5	Kilovolt Amperes Reactive		
				Measure of electrical power		
			KH	Kilowatt Hour		
			KQ	Kilopascal		
				Represents pressure - Kilowatt Q Hour (kQh)		
Conditional	**MEA05**	**740**	**Range Minimum** The value specifying the minimum of the measurement range		**X**	**R 1/20**
			Beginning reading **Condition:** Required for Residential. If the meter provides beginning and ending reads for on and off peak usage, then you must provide beginning and ending reads and consumption. If the meter does not provide beg/ending reads, you only provide consumption.			
Conditional	**MEA06**	**741**	**Range Maximum** The value specifying the maximum of the measurement range		**X**	**R 1/20**
			Ending reading or single reading (e.g., demand) **Condition:** Required for Residential. If the meter provides beginning and ending reads for on and off peak usage, then you must provide beginning and ending reads and consumption. If the meter does not provide beg/ending reads, you only provide consumption.			
Must Use	**MEA07**	**935**	**Measurement Significance Code** Code used to benchmark, qualify or further define a measurement value		**O**	**ID 2/2**
			41	Off Peak		
			42	On Peak		
			43	Intermediate Peak		
			51	Total		
				Totalizer		
			66	Sales		
				Shoulder		
			AA	Summer On Peak		
			AF	Winter On Peak		
			AC	Summer Off Peak		
			AH	Winter Off Peak		

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
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.

VA Use:	Required for a meter that has a meter multiplier other than 1.
Example:	MEA**MU*2

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**MEA02**	**738**	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies MU Multiplier	**O ID 1/3**
Must Use	**MEA03**	**739**	**Measurement Value** The value of the measurement When the multiplier equals 1, do not send this MEA segment.	**X R 1/20**

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
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.

VA Use:	Required if it is available to the meter agent and it is used in the calculation of the customer's bill. This should only be sent with Demand (K1). If not present with a demand quantity, it should be assumed to be 1.
Example:	MEA**ZA*.95

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**MEA02**	**738**	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies ZA Power Factor Relationship between watts and volt - amperes necessary to supply electric load	**O ID 1/3**
Must Use	**MEA03**	**739**	**Measurement Value** The value of the measurement When no Power Factor is present or the value equals 1, do not send this MEA segment.	**X R 1/20**

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.
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.

VA Use: Required when Transformer Loss is not calculated by the meter.
Example: MEA**CO*1.02

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**MEA02**	**738**	**Measurement Qualifier** Code identifying a specific product or process characteristic to which a measurement applies	**O ID 1/3**
			CO Core Loss Transformer Loss Multiplier When a customer owns a transformer and the transformer loss is not measured by the meter.	
Must Use	**MEA03**	**739**	**Measurement Value** The value of the measurement	**X R 1/20**
			Represents the Transformer Loss Multiplier when MEA02 equals "CO". When no multiplier is present, do not send this MEA segment.	

Segment:	**PTD** **Product Transfer and Resale Detail**
Position:	010
Loop:	PTD
Level:	Detail
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data
Syntax Notes:	**1** If either PTD02 or PTD03 is present, then the other is required. **2** If either PTD04 or PTD05 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	PTD Loops may be sent in any order.
VA Use:	Required if there are unmetered services on this account.
Example:	PTD*BC

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**PTD01**	**521**	**Product Transfer Type Code** Code identifying the type of product transfer	**M ID 2/2**
			BC Issue – Other Agency Unmetered Services Summary	

Note:

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

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

VA Use:	Required if there are unmetered services on this account
Example:	DTM*150*19990101*120100*

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 150 Service Period Start	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

VA Use:	Required if there are unmetered services on this account
Example:	DTM*151*19990131

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	**DTM01**	**374**	**Date/Time Qualifier** Code specifying type of date or time, or both date and time 151 Service Period End	**M**	**ID 3/3**
Must Use	**DTM02**	**373**	**Date** Date expressed as CCYYMMDD	**X**	**DT 8/8**

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

Data Element Summary

	Ref. Des.	Data Element	Name	X12	Attributes
Must Use	**REF01**	**128**	**Reference Identification Qualifier** Code qualifying the Reference Identification PRT Product Type LDC Defined Unmetered Service Type	**M**	**ID 2/3**
Must Use	**REF02**	**127**	**Reference Identification** Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier This describes the type of device that this measurement loop references (for instance, a specific wattage of an outdoor light). The valid codes will be defined on each LDC Web Site.	**X**	**AN 1/30**

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

Notes:	This loop is required when there are unmetered services on the account. This will contain the total quantity for the unmetered services.
VA Use:	Required if there are unmetered services on the account
Example:	QTY*QD*500*KH

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
Must Use	**QTY01**	**673**	**Quantity Qualifier** Code specifying the type of quantity		**M**	**ID 2/2**
			QD	Quantity Delivered Used when Quantity in QTY02 is Actual. Whether unmetered services are estimated, calculated, or actual, they will be coded as actual.		
Must Use	**QTY02**	**380**	**Quantity** Numeric value of quantity		**X**	**R 1/15**
Must Use	**QTY03**	**355**	**Unit or Basis for Measurement Code** Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		**M**	**ID 2/2**
			KH	Kilowatt Hour (kWh)		

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.

VA Use:	Required
Example:	SE*28*000000001

Data Element Summary

	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	**SE01**	**96**	**Number of Included Segments** Total number of segments included in a transaction set including ST and SE segments	**M N0 1/10**
Must Use	**SE02**	**329**	**Transaction Set Control Number** Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	**M AN 4/9**

General Note:

For the detail portion, you may send your PTD loops in any order; this is a function of ANSI. The indicator in the PTD loop tells what information is contained in the loop. A translator's mapper will map the loop according to your instructions. Diagrams have been included to assist with understanding the metering configurations being represented in Examples 14 – 18

Example 1:

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

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

BPT*00*REF1-990125*19990125*DD	Beginning Segment
DTM*649*19990128*1700*ET	This is only required on Bill Ready Consolidated Billing scenarios. Time is always represented as Eastern prevailing time.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1234567891 or	LDC Account number or
REF*Q5**8694321LSH	AEP service delivery ID number
REF*45*9395819001	Old LDC Account number (to be sent for 60 days after an account number change)
REF*11*1394951	ESP Account number
PTD*PM	Meter detail loop for kWh
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*11111111	Meter number
REF*NH*RES	LDC Rate
REF*PR*RESRT	LDC Rate Subclass
REF*JH*A	Additive meter
REF*IX*6.0	Number of dials or digits
QTY*QD*100*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*100*KH*1201*1250*51	Total consumption with begin/end reads
QTY*QD*60*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*60*KH*11001*11030*42	(On peak with consumption and begin/end reads)
QTY*QD*40*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*40*KH*23031*23050*41	(Off peak with consumption and begin/end reads)
PTD*PM	Meter detail loop for kW
DTM*150*19990101	Service Period Start

DTM*151*19990131	Service Period End
REF*MG*11111111	Meter number
REF*NH*RES	LDC Rate
REF*PR*RESRT	LDC Rate Subclass
REF*JH*A	Additive meter
REF*IX*6.0	Number of dials or digits
QTY*QD*4.7*K1	Demand
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AA*PRQ*4.7*K1***42	On peak demand – readings not required since reset each month
QTY*QD*4.2*K1	Demand
MEA**MU*2	Meter multiplier = 2
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AA*PRQ*4.2*K1***41	Off peak demand

Example 2:

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

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

BPT*00*REF1-990155*19990131*DD	Beginning Segment
DTM*649*19990202*1700*ET	This is only required on Bill Ready Consolidated Billing scenarios.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1234567890 or	LDC Account number or
REF*Q5**982761523	AEP Service delivery ID number
REF*45*9395819000	Old LDC Account number (to be sent for 60 days after a account number change)
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*11111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*100*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*100*KH*2500*2550*51	Total consumption, and begin and end readings
QTY*QD*60*KH	Consumption
MEA**MU*2	Meter multiplier = 2
MEA*AA*PRQ*60*KH***42	(On peak consumption)
QTY*QD*40*KH	Consumption
MEA*AF*PRQ*40*KH***41	(off peak consumption)
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*11111111	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*4.7*K1	Demand
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AF*PRQ*4.7*K1***42	On peak demand – readings not required since reset each month
QTY*QD*4.2*K1	Demand
MEA**ZA*1.9999	Power factor = 1.9999
MEA*AF*PRQ*4.2*K1***41	Off peak demand)

Example 3:

Following example is for an account with one meter. Meter multiplier is 1. There is no Power factor and no transformer loss. There is no time of use on the meter. Demand is not measured.

- Total consumption is 600 kWh.

BPT*00*REF1-990124*19990124*DD	Beginning Segment
DTM*649*19990128*1700*ET	This is only required on Bill Ready Consolidated Billing scenarios.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*12345678920	LDC Account number
REF*45*93958190020	Old LDC Account number (to be sent for 60 days after a account number change)
REF*11*13949529	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*22222222	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*600*KH	Consumption
MEA*AA*PRQ*600*KH*32000*32600*51	Total consumption, and begin and end readings

Example 4:

- Single meter totalized (one rate), Month1 consumption is 1234.

BPT*00*REF01-990201*19990201*DD	Beginning Segment
DTM*649*19990204*1700*ET	This is only required on Bill Ready Consolidated Billing scenarios.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*2222222S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*1234*KH	Consumption
MEA*AA*PRQ*1234*KH*32000*33234*51	Total consumption, and begin and end readings

Example 5:

- Single meter with time of day billing. Month 1 – On peak – 724, Off peak 539.

BPT*00*REF04-990201*19990201*DD	Beginning Segment
DTM*649*DT*199902041700*ET	This is only required on Bill Ready Consolidated Billing scenarios.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*4444444444	LDC Account number
REF*11*13949594	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*2222233S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*1263*KH	Consumption
MEA*AA*PRQ*1263*KH*10000*11263*51	Total consumption
QTY*QD*724*KH	Consumption
MEA*AA*PRQ*724*KH*32000*32724*42	On peak, and begin and end readings
QTY*QD*539*KH	Consumption
MEA*AA*PRQ*539*KH*15000*15539*41	Off peak, and begin and end readings

Example 6:

- Single meter switched by LDC during month 1. Meter 1 usage 652, meter 2 usage 235.

BPT*00*REF06-990201*19990201*DD	Beginning Segment
DTM*649*****DT*19990204*1700*ET	This is only required on Bill Ready Consolidated Billing scenarios.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*6323423480	LDC Account number
REF*11*13949594	ESP Account number
PTD*PM	Meter detail loop – Meter 1
DTM*150*19990101	Service Period Start
DTM*514*19990121	Service Period End
REF*MG*2222266S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*652*KH	Consumption – Meter 1
MEA*AA*PRQ*652*KH*20000*20652*51	Total consumption, with begin/end readings– Meter 1
PTD*PM	Meter detail loop – Meter 2
DTM*514*19990121	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*3333366S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*235*KH	Consumption – Meter 2
MEA*AA*PRQ*235*KH*0*235*51	Total consumption, with begin/end readings– meter 2

Example 7:

- Cancel Months 1 and 2. Separate documents must be sent for each month.

BPT*01*REF01-990310A*19990310*DD*****REF01-990201	Beginning Segment
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990131	Service Period End
REF*MG*2222222S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*1234*KH	Consumption
MEA*AA*PRQ*1234*KH*32000*33234*51	Total consumption, and begin and end readings (not all LDCs can provide MEA on a cancel)
BPT*01*REF01-990310B*19990301*DD*****REF01-990301	Beginning Segment
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1	LDC Account number
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990201	Service Period Start
DTM*151*19990228	Service Period End
REF*MG*2222222S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*867*KH	Consumption
MEA*AA*PRQ*867*KH*33234*34101*51	Total consumption, and begin and end readings (not all LDCs can provide MEA on a cancel)

Example 8:

- Restatement of usage for Months 1 and 2. Total usage for 2 months is 2043.

BPT*00*REF01-990310C*19990310*DD	Beginning Segment
DTM*649*19990313*1700*ET	
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*111111111111111	LDC Account number
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990101	Service Period Start
DTM*151*19990228	Service Period End
REF*MG*2222222S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*2043*KH	Consumption
MEA*AA*PRQ*2043*KH***51	Total consumption, and readings not known

Example 9:

- **FINAL** reading for single meter with time of day billing. Month 2 – On peak – 189, Off peak 67.

BPT*00*REF04-990301*19990301*DD***F	Beginning Segment
DTM*649*****DT*19990304*1700*ET	This is only required on Bill Ready Consolidated Billing scenarios.
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*4444444444	LDC Account number
REF*11*13949594	ESP Account number
PTD*PM	Meter detail loop
DTM*150*19990201	Service Period Start
DTM*151*19990224	Service Period End
REF*MG*2222233S	Meter Number
REF*JH*A	Meter Role
REF*IX*6.0	Number of dials or digits
QTY*QD*256*KH	Consumption
MEA*AA*PRQ*256*KH*20100*20356*51	Total consumption
QTY*QD*189*KH	Consumption
MEA*AA*PRQ*189*KH*32724*32913*42	On peak, and begin and end readings
QTY*QD*67*KH	Consumption
MEA*AA*PRQ*67*KH*15539*15606*41	Off peak, and begin and end readings

Example 10:

- Following example is for an account with one meter. Meter multiplier is 1. There is no Power factor and no transformer loss. There is no time of use on the meter. Demand is not measured. Supplier requested a check (verification or special) read for current month's reading.

BPT*00*REF1ID*19990124*DD	Beginning Segment
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*12345678920	LDC Account number
REF*11*13949529	ESP Account number
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*22222222	Meter Number
REF*IX*6.0	Number of dials or digits
MEA**PRQ**KH**32600*51	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (32600), Measurement Significance Code (51, Total)

Example 11:

- Following example is for an account with one meter. Meter multiplier is 1. There is no Power factor and no transformer loss. There is no time of use on the meter. Maximum Demand is measured. Supplier requested a check (verification or special) read for current month's reading.

BPT*00*REF1ID*19990124*DD	Beginning Segment
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*12345678920	LDC Account number
REF*11*13949529	ESP Account number
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*22222222	Meter Number
REF*IX*6.0	Number of dials or digits
MEA**PRQ**KH**32600*51	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (32600), Measurement Significance Code (51, Total)
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*22222222	Meter Number
REF*IX*5.2	Number of dials or digits
MEA**PRQ*4.12*K1**4.12*51	Measurement Qualifier (PRQ), Measurement code (K1, demand), end or single reading (4.12), Measurement Significance Code (51, Total or Max Demand)

Example 12:

- Following example is for an account with one meter. Meter multiplier is 2, no Power factor, and no transformer loss. The meter measures on and off peak consumption and on and off peak demand. Supplier requested a check (verification or special) read for current month's reading.

BPT*00*REF1ID*19990124*DD	Beginning Segment
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1234567890	LDC Account number
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*11111111	
REF*IX*6.0	Number of dials or digits
MEA**MU*2	Meter multiplier = 2
MEA**PRQ**KH**2550*51	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (2550), Measurement Significance Code (51, Total)
MEA**PRQ**KH**1234*42	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (1234), Measurement Significance Code (42, On Peak). Provide On Peak reading if available.
MEA**PRQ**KH**2569*41	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (2569), Measurement Significance Code (41, Off Peak). Provide Off Peak reading if available.
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*11111111	Meter number
REF*IX*5.1	Number of dials or digits
MEA**MU*2	Meter multiplier = 2
MEA**PRQ*9.4*K1**4.7*42	Measurement Qualifier (PRQ), Measurement code (K1, demand), end or single reading (4.7), Measurement Significance Code (42 On peak demand – readings not required since reset each month)
MEA**PRQ*8.4*K1**4.2*41	Measurement Qualifier (PRQ), Measurement code (K1, demand), end or single reading (4.2), Measurement Significance Code (41 Off peak demand – readings not required since reset each month)

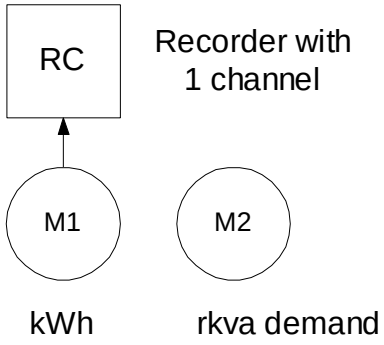
Example 13:

- Following example is for an account with one meter. Meter multiplier is 2, no Power factor, and no transformer loss. The meter measures on and off peak consumption and on and off peak cumulative demand. Supplier requested a check (verification or special) read for current month's reading.

BPT*00*REF1ID*19990124*DD	Beginning Segment
N1*8S*LDC COMPANY*1*007909411	LDC Company
N1*SJ*ESP COMPANY*9*007909422ESP1	ESP Company
N1*8R*CUSTOMER NAME	Customer name
REF*12*1234567890	LDC Account number
REF*11*1394959	ESP Account number
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*11111111	
REF*IX*6.0	Number of dials or digits
MEA**PRQ**KH**2550*51	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (2550), Measurement Significance Code (51, Total)
MEA**PRQ**KH**1234*42	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (1234), Measurement Significance Code (42, On Peak). Provide On Peak reading if available.
MEA**PRQ**KH**2569*41	Measurement Qualifier (PRQ), Measurement code (KH), end or single reading (2569), Measurement Significance Code (41, Off Peak). Provide Off Peak reading if available.
PTD*PM	Meter detail loop
DTM*151*19990123	Service Period End or Special Read Date
REF*MG*11111111	Meter number
REF*IX*5.2	Number of dials or digits
MEA**MU*2	Meter multiplier = 2
MEA**PRQ*9.4*K1*655.92*651.22*42	Measurement Qualifier (PRQ), Measurement code (K1, demand), end or single reading (4.7), Measurement Significance Code (42 On peak demand with cumulative readings)
MEA**PRQ*8.4*K1*325.31*329.51*41	Measurement Qualifier (PRQ), Measurement code (K1, demand), end or single reading (4.2), Measurement Significance Code (41 Off peak demand with cumulative readings)

Example 14:

Following example is for an account with one physical recorder (RC), one drive meter (MTR#1) measuring kWh on channel 1 in the recorder, and one rkva demand meter (MTR#2). There is no Power factor and no transformer loss. **This example only includes the monthly readings, consumption, and demands.**

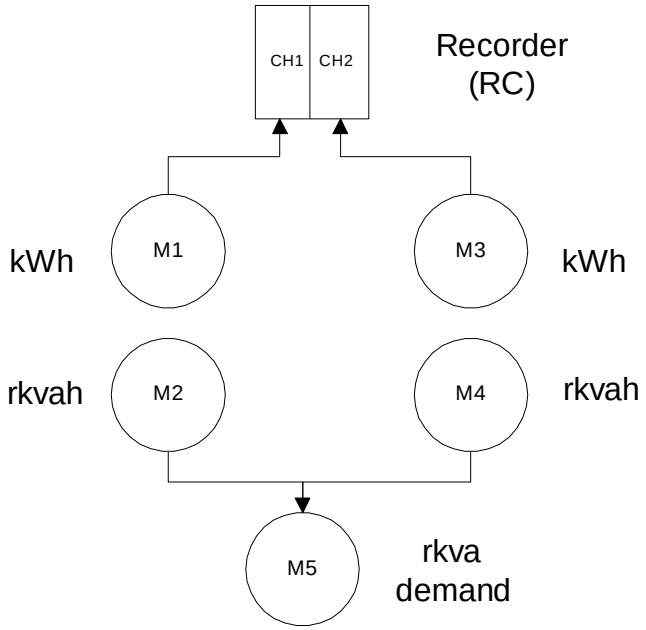


ST*867*0001	Transaction Set Header
BPT*00*991224021131606229935*19991224*DD	Beginning Segment
DTM*649*19991229**	Document Due Date
N1*8S*LDC COMPANY*1*444587965	LDC Company name and DUNS
N1*SJ*ESP COMPANY*9*003847464ESP1	ESP Company name and DUNS + 4
N1*8R*CUSTOMER NAME	Customer name
REF*11*33378555441	ESP Account number
REF*12*99965214754	LDC Account number
REF*BLT*LDC	Identifies LDC as party consolidating bill
REF*PC*DUAL	Identifies party calculating charges
PTD*PM	Metered Services Detail loop
DTM*150*19991118**	Service Period Start Date
DTM*151*19991223**	Service Period End Date
REF*MG*RC	Recorder serial number
REF*NH*117	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*250560*KH	Quantity delivered in kWh
MEA*AF*PRQ*250560*KH***51	Meter reading-actual total, total consumption in kWh with no readings. Total consumption passed by recorder.
	Note: No Power Factor
	Note: No Transformer Loss Multiplier
QTY*QD*95988*KH	Quantity delivered in kWh
MEA*AF*PRQ*95988*KH***41	Meter reading-actual total, total off peak consumption in kWh with no readings. Total off peak consumption passed by recorder.
QTY*QD*154572*KH	Quantity delivered in kWh

MEA*AF*PRQ*154572*KH***42	Meter reading-actual total, total on peak consumption in kWh with no readings. Total on peak consumption passed by recorder.
PTD*PM	Metered Services Detail loop
DTM*150*19991118**	Service Period Start Date
DTM*151*19991223**	Service Period End Date
REF*MG*RC	Recorder serial number
REF*NH*117	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*K1MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*636*K1	Quantity Delivered in kW
MEA*AF*PRQ*636*K1***41	Meter reading-actual total off peak kW demand
QTY*QD*629*K1	Quantity Delivered in kW
MEA*AF*PRQ*629*K1***42	Meter reading-actual total on peak kW demand
PTD*PM	Metered Services Detail loop
DTM*150*19991118**	Service Period Start Date
DTM*151*19991223**	Service Period End Date
REF*MG*MTR#1	Meter Number (serial number of meter/recorder)
REF*NH*117	LDC rate for meter
REF*JH*A	Meter role
REF IX 5.0	Dials and decimals
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*250560*KH	Quantity Delivered in kWh
MEA*AA*PRQ*250560*KH*17922*18270*51	Meter reading-actual beginning and ending readings with total kWh consumption
MEA*MU*720	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*19991118**	Service Period Start Date
DTM*151*19991223**	Service Period End Date
REF*MG*MTR#2	Meter Number (serial number of meter/recorder)
REF*NH*117	LDC rate for meter
REF*JH*A	Meter role
REF IX 5.0	Dials and decimals
REF*MT*K2MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*280.8*K2	Quantity Delivered in rkva demand.
MEA*AF*PRQ*280.8*K2**.39*51	Meter reading-actual total rkva demand
MEA*MU*720	Meter multiplier
SE*3333*0002	Transaction Set Trailer, number of segments, transaction control number

Example 15:

Following example is for an account with one recorder (RC), two drive meters measuring kWh (MTR#1 & MTR#3) recorded on channel 1 and 2 of the recorder. Additional meters at location include two rkvah meters (MTR#2 & MTR#4) driving rkva demand pulse accumulator (MTR#5). The two rkvah meters (MTR#2 & MTR#4) are not read in the field. There is no Power factor and no transformer loss. **This example only includes the monthly readings, consumption, and demands.**



ST*867*0001	Transaction Set Header
BPT*00*00102113160622993501*20000110*DD	Beginning Segment
DTM*649*20000113**	Document Due Date
N1*8S*LDC COMPANY*1*569875145	LDC Company name and DUNS
N1*SJ*ESP COMPANY*9*003847464ESP1	ESP Company name and DUNS + 4
N1*8R*CUSTOMER NAME	Customer name
REF*11*11548755542	ESP Account number
REF*12*14569862147	LDC Account number
REF*BLT*LDC	Identifies LDC as party consolidating bill
REF*PC*DUAL	Identifies party calculating charges
PTD*PM	Metered Services Detail loop
DTM*150*19991207**	Service Period Start Date
DTM*151*20000110**	Service Period End Date
REF*MG*RC	Recorder serial number
REF*NH*117	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*468120*KH	Quantity delivered 468120 kWh

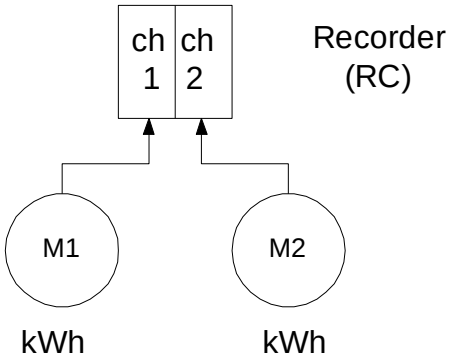
MEA*AF*PRQ*468120*KH***51	Meter reading-beginning actual/ending actual, total consumption of 468120 kWh with no readings. Total consumption passed by recorder.
	Note: No Power Factor
	Note: No Transformer Loss Multiplier
QTY*QD*258575*KH	Quantity delivered 258575 kWh
MEA*AF*PRQ*258575*KH***41	Meter reading-beginning actual/ending actual, off peak consumption of 258575 kWh with no readings. Off peak consumption passed by recorder.
QTY*QD*209545*KH	Quantity delivered 209545 kWh
MEA*AF*PRQ*209545*KH***42	Meter reading-beginning actual/ending actual, on peak consumption of 209545 kWh with no readings. On peak consumption passed by recorder.
PTD*PM	Metered Services Detail loop for demand readings
DTM*150*19991207**	Service Period Start Date
DTM*151*20000110**	Service Period End Date
REF*MG*RC	Recorder serial number
REF*NH*117	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*K1MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*749*K1	Quantity delivered 749 kW demand
MEA*AF*PRQ*749*K1***42	Actual Total kW on peak demand = 749
QTY*QD*750*K1	Quantity delivered 750 kW demand
MEA*AF*PRQ*750*K1***41	Actual Total kW off peak demand = 750

PTD*PM	Metered Services Detail loop
DTM*150*19991207**	Service Period Start Date
DTM*151*20000110**	Service Period End Date
REF*MG*MTR#1	Meter Number
REF*NH*117	LDC rate for meter
REF*JH*A	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*96600*KH	Quantity delivered 96600 kWh
MEA*AA*PRQ*96600*KH*6360*6682*51	Meter reading-beginning actual/ending actual, difference in readings = 322.
MEA*MU*300	Meter multiplier = 300
PTD*PM	Metered Services Detail loop – MTR#3
DTM*150*19991207**	Service Period Start Date
DTM*151*20000110**	Service Period End Date
REF*MG*MTR#3	Meter Number
REF*NH*117	LDC rate for meter
REF*JH*A	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*371520*KH	Quantity delivered 371520 kWh

MEA*AA*PRQ*371520*KH*9027*9543*51	Meter reading-beginning actual/ending actual, difference in readings = 322.
MEA*MU*720	Meter multiplier = 720
PTD*PM	Metered Services Detail loop – MTR#5
DTM*150*19991207**	Service Period Start Date
DTM*151*20000110**	Service Period End Date
REF*MG*MTR#5	Meter Number
REF*NH*117	LDC rate for meter
REF*JH*A	Meter Role
REF*MT*K2MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*383.4*K2	Quantity delivered 383.4 rkva demand
MEA*AF*PRQ*383.4*K2**2.13*51	RKVA demand meter reading (actual total) = 2.13.
MEA*MU*180	Meter multiplier = 180
SE*4444*0002	Transaction Set Trailer, number of segments, transaction control number

Example 16:

Following example is for an account with one physical recorder (RC) and two drive meters (MTR#1 and MTR#2) measuring kWh on channel 1 and channel 2 in the recorder. There is no Power factor and no transformer loss. **This example only includes the monthly readings, consumption, and demands.**



ST*867*0001	Transaction Set Header
BPT*00*00102113160622993501*20000112*DD	Beginning Segment
DTM*649*20000118*180000*ET	Document Due Date, Time, & Time Code
N1*8S*LDC COMPANY*1*444587965	LDC Company name and DUNS
N1*SJ*ESP COMPANY*9*003847464ESP1	ESP Company name and DUNS + 4
N1*8R*CUSTOMER NAME	Customer name
REF*11*44555856581	ESP Account number
REF*12*78965452555	LDC Account number
REF*BLT*LDC	Identifies LDC as party consolidating bill
REF*PC*DUAL	Identifies party calculating charges

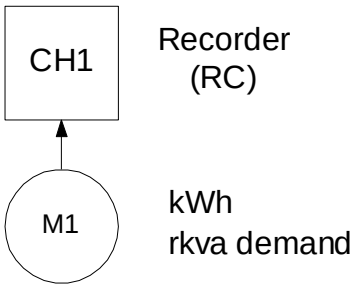
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*RC	Recorder Serial Number
REF*NH*227	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*52032*KH	Quantity delivered 52032 kWh
MEA*AF*PRQ*52032*KH***51	Meter reading-actual total, total consumption of 52032 kWh with no readings. Total consumption passed by recorder.
	Note: No Power Factor
	Note: No Transformer Loss Multiplier
QTY*QD*21138*KH	Quantity delivered 21138 kWh
MEA*AF*PRQ*21138*KH***42	Meter reading-beginning actual/ending actual, on peak consumption of 21138 kWh with no readings. On peak consumption passed by recorder.
PTD*PM	Metered Services Detail loop

DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*RC	Recorder Serial Number
REF*NH*227	LDC rate for meter
REF*JH*I	Meter Role
REF IX 5.2	Dials and decimals
REF*MT*K1MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*250*K1	Quantity Delivered in kW
MEA*AF*PRQ*250*K1***41	Meter reading-actual total kW demand
QTY*QD*199*K1	Quantity Delivered in kW
MEA*AF*PRQ*199*K1***42	Meter reading-actual total kW demand

PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#1	Meter Number
REF*NH*227	LDC rate for meter
REF*JH*A	Meter Role
REF IX 5.0	Dials and decimals
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*28032*KH	Quantity Delivered in kWh
MEA*AA*PRQ*28032*KH*3677*3750*51	Meter reading-actual beginning and ending readings with difference in reading for total kWh consumption
MEA*MU*384	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*19991213*ET	Service Period Start Date
DTM*151*20000112*ET	Service Period End Date
REF*MG*MTR#2	Meter Number
REF*NH*227	LDC rate for meter
REF*JH*I	Meter Role
REF IX 5.0	Dials and decimals
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*24000*KH	Quantity Delivered in kWh
MEA*AA*PRQ*24000*KH*820*850*51	Meter reading-actual beginning and ending readings with difference in reading for total kWh consumption
MEA*MU*800	Meter multiplier
SE*4567*0003	Transaction Set Trailer, number of segments, transaction control number

Example 17:

Following example is for an account with one physical recorder (RC), one drive meter (MTR#1) measuring kWh on channel 1 in the recorder and rkva demand. There is no Power factor and no transformer loss. **This example only includes the monthly readings, consumption, and demands.**

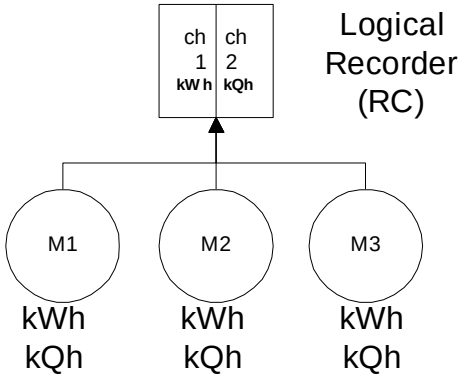


ST*867*0001	Transaction Set Header
BPT*00*00020419595006213101*20000204*DD******	Beginning Segment
DTM*649*20000209*	Document Due Date
N1*8S*LDC COMPANY*1*444587965	LDC Company name and DUNS
N1*SJ*ESP COMPANY*9*003847464ESP1	ESP Company name and DUNS + 4
N1*8R*CUSTOMER NAME	Customer name
REF*11*11559863517	ESP Account number
REF*12*77885542156	LDC Account number
REF*BLT*LDC	Identifies LDC as party consolidating bill
REF*PC*DUAL	Identifies party calculating charges
PTD*PM	Metered Services Detail loop
DTM*150*20000104**	Service Period Start Date
DTM*151*20000204**	Service Period End Date
REF*MG*RC	Recorder serial number
REF*NH*227	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*119520*KH	Quantity delivered in kWh
MEA*AF*PRQ*119520*KH***51	Meter reading-actual total, total consumption in kWh with no readings. Total consumption passed by recorder.
PTD*PM	Metered Services Detail loop
DTM*150*20000104**	Service Period Start Date
DTM*151*20000204**	Service Period End Date
REF*MG*RC	Recorder serial number
REF*NH*227	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*K1MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*325*K1	Quantity Delivered in kW
MEA*AF*PRQ*325*K1***41	Meter reading-actual total off peak kW demand

QTY*QD*360*K1	Quantity Delivered in kW
MEA*AF*PRQ*360*K1***42	Meter reading-actual total on peak kW demand
PTD*PM	Metered Services Detail loop
DTM*150*20000104**	Service Period Start Date
DTM*151*20000204**	Service Period End Date
REF*MG*MTR#1	Meter Number (serial number of meter/recorder)
REF*NH*227	LDC rate for meter
REF*JH*A	Meter Role
REF IX 5.0	Dials and decimals
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*119520*KH	Quantity Delivered in kWh
MEA*AA*PRQ*119520*KH*2969*3135*51	Meter reading-actual beginning and ending readings with total kWh consumption
MEA*MU*720	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*20000104**	Service Period Start Date
DTM*151*20000204**	Service Period End Date
REF*MG*MTR#1	Meter Number (serial number of meter/recorder)
REF*NH*227	LDC rate for meter
REF*JH*I	Meter Role
REF IX 5.0	Dials and decimals
REF*MT*K2MON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*43.2*K2	Quantity Delivered in rkva demand.
MEA*AF*PRQ*43.2*K2**.06*51	Meter reading-actual total rkva demand
MEA*MU*720	Meter multiplier
SE*6789*0004	Transaction Set Trailer, number of segments, transaction control number

Example 18:

Following example is for an account with one logical recorder (RC), three drive meters with recorders under glass (MTR#1, MTR#2 & MTR#3) measuring kWh on channel 1 and kQh on channel 2 in the recorder. There is no Power factor and no transformer loss. **This example only includes the monthly readings, consumption, and demands.**



ST*867*0001	Transaction Set Header
BPT*00*00102113160622993501*20000112*DD*******	Beginning Segment
DTM*649*20000118**	Document Due Date
N1*8S*LDC COMPANY*1*444587965	LDC Company name and DUNS
N1*SJ*ESP COMPANY*9*003847464ESP1	ESP Company name and DUNS + 4
N1*8R*CUSTOMER NAME	Customer name
REF*11*46985555785	ESP Account number
REF*12*33569985674	LDC Account number
REF*BLT*LDC	Identifies LDC as party consolidating bill
REF*PC*DUAL	Identifies party calculating charges
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*RC	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*I	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*161915*KH	Quantity delivered 161915 kWh
MEA*AF*PRQ*161915*KH***51	Meter reading-actual total, total consumption of 161915 kWh with no readings. Total consumption passed by recorder.
QTY*QD*90903*KH	Quantity delivered 90903 kWh
MEA*AF*PRQ*90903*KH***41	Meter reading-beginning actual/ending actual, off peak consumption of 90903 kWh with no readings. Off peak consumption passed by recorder.
QTY*QD*71012*KH	Quantity delivered 71012 kWh

MEA*AF*PRQ*71012*KH***42	Meter reading-beginning actual/ending actual, on peak consumption of 71012 kWh with no readings. On peak consumption passed by recorder.
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#1	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*A	Meter Role
REF IX 6.0	Dials and decimals
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*95040*KH	Quantity Delivered in kWh
MEA*AA*PRQ*95040*KH*1561*1693*51	Meter reading-actual beginning and ending readings with difference in reading for total kWh consumption
MEA*MU*720	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#1	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*A	Meter Role
REF IX 6.0	Dials and decimals
REF*MT*KQMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*115920*KQ	Quantity Delivered in kQh
MEA*AA*PRQ*115920*KH*1824*1985*51	Meter reading-actual beginning and ending readings with difference in reading for total kQh consumption
MEA*MU*720	Meter multiplier

PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#2	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*A	Meter Role
REF IX 6.0	Dials and decimals
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*11520*KH	Quantity Delivered in kWh
MEA*AA*PRQ*11520*KH*218*234*51	Meter reading-actual beginning and ending readings with difference in reading for total kWh consumption
MEA*MU*720	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#2	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*A	Meter Role
REF IX 6.0	Dials and decimals
REF*MT*KQMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*13680*KQ	Quantity Delivered in kQh
MEA*AA*PRQ*13680*KH*236*255*51	Meter reading-actual beginning and ending readings with difference in reading for total kQh consumption
MEA*MU*720	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#3	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*A	Meter Role
REF*MT*KHMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*54720*KH	Quantity Delivered in kWh
MEA*AA*PRQ*54720*KH*943*1019*51	Meter reading-actual beginning and ending readings with difference in reading for total kWh consumption
MEA*MU*720	Meter multiplier
PTD*PM	Metered Services Detail loop
DTM*150*19991213**	Service Period Start Date
DTM*151*20000112**	Service Period End Date
REF*MG*MTR#3	Meter Number (serial number of meter/recorder)
REF*NH*130	LDC rate for meter
REF*JH*A	Meter Role

REF IX 6.0	Dials and decimals
REF*MT*KQMON	Following quantity and measurements are totals for the month (monthly interval).
QTY*QD*68400*KQ	Quantity Delivered in kQh
MEA*AA*PRQ*68400*KH*1105*1200*51	Meter reading-actual beginning and ending readings with difference in reading for total kQh consumption
MEA*MU*720	Meter multiplier
SE*5567*0009	Transaction Set Trailer, number of segments, transaction control number