

# Ohio Electric Implementation Guideline

For  
**Electronic Data Interchange**

TRANSACTION SET

# 867

## Usage

Ver/Rel 004010

# Summary of Changes

Version 1.0.0  
May 1, 2001

Version 1.5.0  
May 1, 2001

Version 2.0.0  
December 31, 2001

Version 2.1.0  
June 30, 2002

## Initial Release

- Add DTM segment for document due date into the 867 per Change Control 11.
- Change position of N1 loop for Scheduling Coordinator from position 040 to position 080 per Change Control 17.
- Correct two typos in the 867 IG (The REF\*PR and the QTY segments in the PL loop contain a gray box. In the gray box it lists the type of 867 (HI, HU, IU, MU). These two segments have a typo and list HU twice.) per Change Control 20.
- Remove the Summary pages (usually pages 2 and 3) from the implementation guides. These pages are automatically created by Foresight, but the last round of changes to the documents was done in Word and has not been updated in Foresight per Change Control 22.
- Added note to MEA01 elements in the 867 for Cinergy to allow for them to send only current reading (and not previous reading) for all units of measure, not just demand per Change Control 27
  - Added note to N1~8R segment to show AP validates on first 4 characters of customer name per change control 48.
  - Added text to title on N1 pages to show which N1 per change control 50
  - Updated REF~Q5 gray boxes to show SDID per change control 51

## Definitions:

The following acronyms are used throughout this 867 Guideline.

HI – Historical Interval. The HI will be sent in response to an 814 HI request. This will be historical usage for an account that has an interval meter.

HU – Historical Usage. The HU will be sent in response to an 814 HU request. This will be historical usage for an account that has non-interval metered or unmetered services.

MU – Monthly Usage. The MU will be sent monthly (may be sent bi-monthly for customers on bi-monthly billing in Allegheny territory) for any account that has non-interval metered or unmetered services. This is the usage that will be used to calculate the 810 in Consolidated Billing

IU – Interval Usage. The IU will be sent monthly for any account that has an interval meter. This is the usage that will be used to calculate the 810 in Consolidated Billing

## 867 Looping

The looping in the 867 is directly related to the type of services on the account and the service being requested by the CRES. The type of service on the account is shown in the BPT04 element.

### Historical Usage:

- If there are non-interval metered services and/or unmetered services on the account, the BPT04 on the 867 should be “DD”.
  - If there are metered services on the account, a PTD~PL loop will be sent. There should be one PTD~PL loop for each unit of measure.
  - If there are unmetered services on the account, a PTD~BC and/or PTD~BD loop must be sent.
  - If there are both non-interval metered and unmetered services on the account, there should be one PTD~PL loop for each metered unit of measure and at least one of PTD~BC or PTD~BD loops for each unmetered service.
- If there is an interval meter on the account, the BPT04 on the 867 should be “C1”. However, there will be no summary information provided.
  - There should be one PTD~PM loop for each unit of measure

### Monthly Usage:

- If there are non-interval metered services and/or unmetered services on the account, the BPT04 on the 867 should be “DD”.
  - If there are metered services on the account, a PTD~SU and PTD~PL loop will be sent. There should be one PTD~SU loop for each unit of measure on the account. If there are multiple meters, the meters will be summarized into one PTD~SU loop for each unit of measure.
  - If there are unmetered services on the account, a PTD~BC and/or PTD~BD loop must be sent.
- If there is an interval meter on the account, the BPT04 on the 867 should be “C1” if the CRES requested detail on the 814 or “X5” if the CRES requested summary on the 814.
  - If the BPT04 = “C1”, a PTD~BO loop and a PTD~PM loop will be sent. If the BPT04 = “X5”, only the BPT~BO loop should be sent. There should be one PTD~BO loop and one PTD~PM loop for each meter and unit of measure on the account. For example, an account with 2 meters which each read kWh and kW would have 4 PTD~BO loops and 4 PTD~PM loops (one PTD~BO and one PTD~PM loop each for: kWh for meter 1, kW for meter 1, kWh for meter 2, and kW for meter 2).
- If there is a combination of a metered/unmetered and interval service on the account, the BPT04 on the 867 should be “DR”. In this case, each service should be sent with the appropriate loops as shown above.

# 867 Product Transfer and Resale Report

Functional Group ID=**PT**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Product Transfer and Resale Report Transaction Set (867) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to: (1) report information about product that has been transferred from one location to another; (2) report sales of product from one or more locations to an end customer; or (3) report sales of a product from one or more locations to an end customer, and demand beyond actual sales (lost orders). Report may be issued by either buyer or seller.

## Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.

**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:**  
**Notes:** Required  
ST~867~000000001

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set 867 Product Transfer and Resale Report	M ID 3/3
M	ST02	329	<b>Transaction Set Control Number</b> 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:**

**Notes:** If BPT01 = '01' (Cancellation), then an original 867 must be sent as soon as corrected data is available, if there is any replacement/corrected data.

Required

BPT~00~199902010001~19990131~DD

BPT~00~199902010001~19990131~DD~~~F

BPT~01~199902020001~19990131~DD~~~~~1999020100001

#### Data Element Summary

Ref.	Data Element	Name	Attributes
M	<u>BPT01</u>	<u>353</u> <b>Transaction Set Purpose Code</b>	<b>M</b> <b>ID 2/2</b>
		Code identifying purpose of transaction set	
		00 Original	
		01 Cancellation	
		52 Response to Historical Inquiry	
M	<b>BPT02</b>	<b>127</b> <b>Reference Identification</b>	<b>O</b> <b>AN 1/30</b>
		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 time.	
		This code will be used as a cross reference to the 810 billing document, and for billing parties that make the other party whole, it will also be cross referenced on the 820.	
		Transaction Reference numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
M	<b>BPT03</b>	<b>373</b> <b>Date</b>	<b>M</b> <b>DT 8/8</b>
		Date expressed as CCYYMMDD	
		The transaction creation date - the date that the data was processed by the sender's application system.	
M	<b>BPT04</b>	<b>755</b> <b>Report Type Code</b>	<b>O</b> <b>ID 2/2</b>
		Code indicating the title or contents of a document, report or supporting item	
		C1 Cost Data Summary	
		Indicates transaction is an Interval Data transaction. This will be used when supplier is receiving both summary and detail interval data on an account with only interval meters.	

DD	Distributor Inventory Report
	For monthly metered or unmetered customer only (no interval meters on the account).
DR	Datalog Report
	Indicates transaction contains some combination of Interval, Monthly, and/or Unmetered Data.
KJ	Change Proposal Data
	Meter Change out when meter agent changes monthly usage
X5	Restricted Report
	Indicates interval customer is receiving only summary data (at the meter level). There are no monthly meters on the account.

**C**      **BPT07**      **306**      **Action Code**      **O**      **ID 1/2**

Code indicating type of action

Conditional, Required if final usage reading.

F	Final
	Final meter read data being sent for this customer. The customer account is final with the EDU or the customer switched to a new CRES.

**C**      **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 contains the transaction identification number from BPT02 of the transaction that is being cancelled.

Conditional: Required if this is a cancel (BPT01 = 01)

**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, not used for Dual Billing or LDC Consolidated Rate Ready

**Examples:** DTM\*649\*19990131\*2359

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time  649 Document Due  The date that the non-billing party must provide the 810 transaction back to the billing party.	M ID 3/3
M	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8
M	DTM03	337	<b>Time</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)  HHMM format	X TM 4/8

**Segment:** **N1** Name (8S - EDU)  
**Position:** 080  
**Loop:** N1 Optional  
**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:** Required  
 N1~8S~EDU COMPANY~1~007909411~41

**Data Element Summary**

Ref.	Data			Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>		
M	N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual 8S Consumer Service Provider (CSP) EDU	<b>M ID 2/3</b>
M	N102	93	<b>Name</b> Free-form name EDU Name	<b>X AN 1/60</b>
M	N103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	<b>X ID 1/2</b>
M	N104	67	<b>Identification Code</b> Code identifying a party or other code EDU D-U-N-S Number or D-U-N-S + 4 Number	<b>X AN 2/80</b>
M	N106	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual 40 Receiver 41 Submitter	<b>O ID 2/3</b>

**Segment:** **N1** Name (SJ - CRES)  
**Position:** 080  
**Loop:** N1 Optional  
**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:** Required  
 N1~SJ~CRES COMPANY~9~007909422CRES~~40  
 N1~SJ~CRES COMPANY~1~007909422~~40

#### Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual SJ Service Provider CRES	M ID 2/3
M	N102	93 Name Free-form name CRES Name	X AN 1/60
M	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	X ID 1/2
M	N104	67 Identification Code Code identifying a party or other code CRES D-U-N-S Number or D-U-N-S + 4 Number	X AN 2/80
M	N106	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 40 Receiver 41 Submitter	O ID 2/3

**Segment:** **N1** Name (RS - Scheduling Coordinator)  
**Position:** 080  
**Loop:** N1 Optional  
**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:** Required when a CRES is using more than one Scheduling Coordinator  
 N1~RS~SCHEDULING COORDINATOR~1~006193212S

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		RS Receiving Facility Scheduler	
		Scheduling Coordinator	
M	N102	93 Name	X AN 1/60
		Free-form name	
		Name of Scheduling Coordinator	
M	N103	66 Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
M	N104	67 Identification Code	X AN 2/80
		Code identifying a party or other code	
		Scheduling Coordinator D-U-N-S Number or D-U-N-S + 4 Number	

**Segment:** **N1** Name (8R - Customer)  
**Position:** 080  
**Loop:** N1 Optional  
**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:** Required  
 NOTE: Allegheny will validate on the first 4 characters of the customer name.  
 N1~8R~CUSTOMER NAME  
 N1~8R~CUSTOMER NAME~92~STORE 7813

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 8R Consumer Service Provider (CSP) Customer Customer	M ID 2/3
M	N102	93	Name Free-form name Customer Name as documented in the sender's application system.	X AN 1/60
C	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) Condition: Required if available 92 Assigned by Buyer or Buyer's Agent	X ID 1/2
C	N104	67	Identification Code Code identifying a party or other code Store Number Condition: Required if available	X AN 2/80

**Segment:** **REF** Reference Identification (CRES Account Number)  
**Position:** 120  
**Loop:** N1 Optional  
**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:** Account 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 account number must be present.  
Required if previously sent on the Enrollment or Change.  
REF~11~1394959

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 11 Account Number CRES assigned customer account number	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier CRES customer account number	X AN 1/30

**Segment:** **REF** Reference Identification (EDU Account Number)  
**Position:** 120  
**Loop:** N1 Optional  
**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:**

Account 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 account number must be present.  
 Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number.  
 REF~12~1239485790

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 12 Billing Account EDU Account Number	M ID 2/3
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDU Account Number	X AN 1/30

**Segment:** **REF** Reference Identification (Previous EDU Account Number)  
**Position:** 120  
**Loop:** N1 Optional  
**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:** Account 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 account number must be present.  
Condition: Required if the account number has changed in the last 60 days. Required for all utilities except AEP, which will use Service Delivery Identification Number.  
REF~45~939581900

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 45 Old Account Number EDU's Previous Account Number	M ID 2/3
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDU Previous Account Number	X AN 1/30

**Segment:** **REF** Reference Identification (Billing Type)  
**Position:** 120  
**Loop:** N1 Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Required  
 REF~BLT~LDC

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification BLT Billing Type	M ID 2/3
				Identifies whether the bill is consolidated by the EDU (LDC) or CRES (ESP), or whether each party will render their own bill. See REF02 for valid values.
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DUAL Dual Billing	X AN 1/30
				Each party bills the customer for its portion
			ESP Energy Supplier Consolidated Billing	The CRES bills the customer.
			LDC Utility Consolidated Billing	The EDU bills the customer

**Segment:** **REF** Reference Identification (Party Calculating Charges)  
**Position:** 120  
**Loop:** N1 Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Required  
 REF~PC~LDC

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification PC Production Code Identifies the party that is to calculate the charges on the bill	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier DUAL Each Party calculates its portion of the bill ESP The CRES calculates charges for each party LDC The EDU calculates charges for each party	X AN 1/30

**Segment:** **REF** Reference Identification (Q5 = SDID Number)  
**Position:** 120  
**Loop:** N1 Optional  
**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.  
Required if customer is in AEP service territory  
REF~Q5~9876543245678DCH

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification Q5 Property Control Number AEP assigned Service Delivery Identification Number	M ID 2/3
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier AEP assigned Service Delivery Identification Number	X AN 1/30

**Segment:** **PTD** Product Transfer and Resale Detail (Non-Interval Metered Services Summary)

**Position:** 010

**Loop:** PTD Mandatory

**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:**

HI: Not Used

HU: Not Used

IU: Not Used

MU: Required if there are metered services on the account

A summary loop will be provided for each type of consumption (unit of measure) for all meters on the account. Usage for all meters on the same tariff rate will be summed in this loop.

PTD~SU

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
M	PTD01	521 Product Transfer Type Code Code identifying the type of product transfer SU Summary	M ID 2/2

**Segment:** **DTM** Date/Time Reference (Service Period Start)  
**Position:** 020  
**Loop:** **PTD** Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 DTM~150~19990101

**Data Element Summary**

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

**Segment:** **DTM** Date/Time Reference (Service Period End)  
**Position:** 020  
**Loop:** **PTD** Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 DTM~151~19990131

**Data Element Summary**

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

**Segment:** QTY Quantity  
**Position:** 110  
**Loop:** QTY Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify quantity information  
**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.  
**Semantic Notes:** 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**  
**Notes:** There will be one QTY loop for each of the QTY03 Units of Measurement listed below that are measured on this account.  
 HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 QTY~QD~22348~KH

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	QTY01	673 Quantity Qualifier Code specifying the type of quantity KA Estimated QD Quantity Delivered	M ID 2/2
M	QTY02	380 Quantity Numeric value of quantity	X R 1/15
M	QTY03	C001 Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use) Note this is a composite data element, populate C00101	O
M	C00101	355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand K2 Kilovolt Amperes Reactive Demand K3 Kilovolt Amperes Reactive Hour K4 Kilovolt Amperes KH Kilowatt Hour	M ID 2/2

**Segment:** **PTD** **Product Transfer and Resale Detail (Non-Interval Metered Services Detail)**

**Position:** 010

**Loop:** PTD Mandatory

**Level:** Detail

**Usage:** Optional

**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:**

HI: Not Used

HU: Required if there are metered services on the account

IU: Not Used

MU: Required if there are metered services on the account One PTD loop is required for each meter and/or for each unit of measure on the account.

PTD~PL

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	<u>Des.</u> PTD01	<u>Element</u> 521 <b>Product Transfer Type Code</b> Code identifying the type of product transfer PL Property Level Movement/Sale	<b>M ID 2/2</b>

**Segment:** **DTM** Date/Time Reference (Service Period Start)  
**Position:** 020  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account, unless a Meter Exchange Date (DTM~514) is substituted for this code.  
 DTM~150~19990101

**Data Element Summary**

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

**Segment:** **DTM** Date/Time Reference (Service Period End)  
**Position:** 020  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account, unless a Meter Exchange Date (DTM~514) is substituted for this code.  
 DTM~151~19990131

**Data Element Summary**

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

**Segment:** **DTM** Date/Time Reference (Meter Exchange Date)  
**Position:** 020  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required when a meter is exchanged.  
 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**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time 514 Transferred Meter Exchange Date	M ID 3/3
M	DTM02	373	Date Date expressed as CCYYMMDD Date expressed as CCYYMMDD	X DT 8/8

**Segment:** **REF** Reference Identification (Number of Dials)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required for meters with dials  
 REF~IX~6.0~KHMON  
 REF~IX~5.1~KHMON~TU^41  
 REF~IX~4.2~K1MON~TU^43

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification IX Item Number Number of dials on the meter displayed as X.Y. The notation X.Y means that the meter has X dials to the left of the decimal point and Y dials to the right.	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Number of Dials	X AN 1/30
M	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content Meter Type. See Meter Type (REF~MT) on 814 Enrollment for valid codes. "COMBO" is not a valid code for this element.	X AN 1/80
C	REF04	C040	<b>Reference Identifier</b> To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier Note this is a composite data element. Populate C04001 and C04002. Condition: if this is a time of use meter, this must be sent	O
C	C04001	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification Condition: if this is a time of use meter, this must be sent TU Trial Location Code Time of Use	C ID 2/3
C	C04002	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier NOTE: Other codes (as identified by UIG) can be used to identify quantities measured by the meter, but should not be used to identify tariffed/calculated measurements. Condition: if this is a time of use meter, this must be sent 41 Off Peak 42 On Peak	C AN 1/30

43	Intermediate Peak
	Shoulder
51	Totalizer
	Total

**Segment:** **REF** Reference Identification (Meter Role)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 REF~JH~A

**Data Element Summary**

<b>Ref.</b>	<b>Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification JH Tag Meter Role	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A Additive I Ignore S Subtractive	X AN 1/30

**Segment:** **REF** Reference Identification (Meter Number)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**  
**Notes:**

HI: Not Used  
 HU: Required if there are metered services on the account  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 REF~MG~2222277S

**Data Element Summary**

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

**Segment:** **REF** Reference Identification (Meter Type)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Required if there are metered services on the account  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 REF~MT~KHMON

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification MT Meter Ticket Number Meter Type	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier 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 reported by the metering agent. Valid values can be a combination of the following values:  Type of Consumption K1 Kilowatt Demand (kW) K2 Kilovolt Amperes Reactive Demand (kVAR) K3 Kilovolt Amperes Reactive Hour (kVARh) K4 Kilovolt Amperes (kVA) KH Kilowatt Hour (kWh)  Metering Interval Reported for Billing Purposes nnn Number of minutes from 001 to 999 ANN Annual BIA Bi-annual BIM Bi-monthly DAY Daily MON Monthly QTR Quarterly TOU Time of Use  For Example: KHMON Kilowatt Hours Per Month K1015 Kilowatt Demand per 15 minute interval "COMBO" cannot be used in this segment.	X AN 1/30
C	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content Condition: Required if the account has cogeneration COGEN Cogeneration Meter	X AN 1/80

**Segment:** **REF** Reference Identification (EDU Rate Code)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**  
**Notes:**

HI: Not Used  
 HU: Required if there are metered services on the account  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 REF~NH~RES

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification NH                  Rate Card Number EDU Rate Code or tariff	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDU Rate Code or tariff	X AN 1/30

**Segment:** **REF** Reference Identification (EDU Rate Subclass)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**  
**Notes:**

HI: Not Used  
HU: Conditional – send if there are metered services on the account and if it is stored in the EDU system  
IU: Not Used  
MU: Conditional – send if there are metered services on the account and if it is stored in the EDU system  
REF~PR~HEAT  
REF~PR~WHA

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification PR Price Quote Number EDU Rate Subclass or Revenue Class - Used to provide further classification of a rate.	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier EDU Rate Subclass or Revenue Class	X AN 1/30

**Segment:** QTY Quantity  
**Position:** 110  
**Loop:** QTY Optional  
**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:**

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.  
 HI: Not Used  
 HU: Required if there are metered services on the account  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 QTY~QD~22348~KH

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	QTY01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity KA Estimated Quantity is estimated QD Quantity Delivered Quantity is actual	M ID 2/2
M	QTY02	380	<b>Quantity</b> Numeric value of quantity	X R 1/15
M	QTY03	C001	<b>Composite Unit of Measure</b> To identify a composite unit of measure (See Figures Appendix for examples of use) Note this is a composite data element, populate C00101	O
M	C00101	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand kW - Represents potential power load measured at predetermined intervals K2 Kilovolt Amperes Reactive Demand kVAR - Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter K3 Kilovolt Amperes Reactive Hour kVARh - Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters K4 Kilovolt Amperes kVA - Kilovolt Amperes KH Kilowatt Hour kWh - Kilowatt Hour	M ID 2/2

**Segment:** **MEA** Measurements (Readings & Time of Use)

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:**

- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
- 2 If MEA05 is present, then MEA04 is required.
- 3 If MEA06 is present, then MEA04 is required.
- 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
- 5 Only one of MEA08 or MEA03 may be present.

**Semantic Notes:**

**Comments:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:**

The MEA segment is sent for each QTY loop. The MEA will indicate the "time of use" that applies to the QTY. If meter readings are included in the MEA, they will indicate the "time of use" that the meter readings apply to.

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 MEA~AA~PRQ~772~KH~10500~11272~42  
 MEA~AF~PRQ~12799~K1~12799~51

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	MEA01	737	Measurement Reference ID Code	O ID 2/2
			Code identifying the broad category to which a measurement applies	
			AA Meter reading-beginning actual/ending actual	
			AE Meter reading-beginning actual/ending estimated	
			AF Actual Total	
			Recommended for demand because demand usually has only 1 reading. This code will also be used by Cinergy if previous reading is not being supplied for units of measure other than demand.	
			EA Meter reading-beginning estimated/ending actual	
			EE Meter reading-beginning estimated/ending estimated	
M	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			PRQ Product Reportable Quantity	
M	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			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.	
M	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
M	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1 Kilowatt Demand	

				kW - Represents potential power load measured at predetermined intervals
			K2	Kilovolt Amperes Reactive Demand
				kVAR - Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter
			K3	Kilovolt Amperes Reactive Hour
				kVARh - Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters
			K4	Kilovolt Amperes
				kVA - Kilovolt Amperes
			KH	Kilowatt Hour
				kWh - Kilowatt Hour
<b>C</b>	<b>MEA05</b>	<b>740</b>	<b>Range Minimum</b>	<b>X R 1/20</b>
			The value specifying the minimum of the measurement range	
			Beginning Reading	
			Required unless MEA01 = AF	
<b>M</b>	<b>MEA06</b>	<b>741</b>	<b>Range Maximum</b>	<b>X R 1/20</b>
			The value specifying the maximum of the measurement range	
			Ending reading or single reading (demand).	
<b>C</b>	<b>MEA07</b>	<b>935</b>	<b>Measurement Significance Code</b>	<b>O ID 2/2</b>
			Code used to benchmark, qualify or further define a measurement value	
			NOTE: Other codes (as identified by UIG) can be used to identify quantities measured by the meter, but should not be used to identify tariffed/calculated measurements.	
			Condition: If time of use meter, this must be sent	
			41	Off Peak
			42	On Peak
			43	Intermediate Peak
				Shoulder
			51	Totalizer
				Total

**Segment:** **MEA** Measurements (Meter Multiplier)

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:**

- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
- 2 If MEA05 is present, then MEA04 is required.
- 3 If MEA06 is present, then MEA04 is required.
- 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
- 5 Only one of MEA08 or MEA03 may be present.

**Semantic Notes:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

**Comments:**

- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:**

If no meter multiplier, then populate with "1"

HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account  
 MEA~~MU~1

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	MEA02	738	<b>Measurement Qualifier</b> Code identifying a specific product or process characteristic to which a measurement applies MU Multiplier Meter Multiplier (Ending Reading - Beginning Reading) * Meter Multiplier = Billed Usage	<b>O ID 1/3</b>
M	MEA03	739	<b>Measurement Value</b> The value of the measurement Meter Multiplier	<b>X R 1/20</b>

**Segment:** **MEA Measurements (Power Factor)**

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

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

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

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

5 Only one of MEA08 or MEA03 may be present.

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

**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:** HI: Not Used

HU: Not Used

IU: Not Used

MU: Required if there are metered services on the account and it is available

MEA~~ZA~.95

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	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
M	MEA03	739	Measurement Value The value of the measurement Power Factor	X R 1/20

**Segment:** **MEA** Measurements (Transformer Loss Factor)

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

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

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

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

5 Only one of MEA08 or MEA03 may be present.

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

**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:** HI: Not Used  
 HU: Not Used  
 IU: Not Used  
 MU: Required if there are metered services on the account and the transformer loss is not measured by the meter  
 MEA~~CO~1.02

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	MEA02	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies CO Core Loss	O ID 1/3
M	MEA03	739	Measurement Value The value of the measurement Transformer Loss Factor	X R 1/20

**Segment:** **DTM** Date/Time Reference  
**Position:** 210  
**Loop:** QTY Optional  
**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:**

HI: Not Used  
 HU: Required if there are metered services on the account  
 IU: Not Used  
 MU: Not Used  
 DTM~150~19990219

**Data Element Summary**

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

**Segment:** **DTM** Date/Time Reference  
**Position:** 210  
**Loop:** QTY Optional  
**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:**

HI: Not Used  
 HU: Required if there are metered services on the account  
 IU: Not Used  
 MU: Not Used  
 DTM~151~19990322

**Data Element Summary**

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

**Segment:** **PTD** Product Transfer and Resale Detail (Interval Meter Services Summary)  
**Position:** 010  
**Loop:** PTD Optional  
**Level:** Detail  
**Usage:** Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 One PTD loop is required for each meter or for each unit of measure on the account.  
 PTD~BO

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	<u>Des.</u> PTD01	<u>Element</u> 521 <u>Product Transfer Type Code</u> Code identifying the type of product transfer BO Designated Items	<u>M</u> <u>ID 2/2</u>
			Provides Summary information for each interval meter or unit of measure.

**Segment:** **DTM** Date/Time Reference (Service Period Start)  
**Position:** 020  
**Loop:** PTD Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 DTM~150~19990101

**Data Element Summary**

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

**Segment:** **DTM** Date/Time Reference (Service Period End)  
**Position:** 020  
**Loop:** PTD Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 DTM~151~19990131

**Data Element Summary**

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

**Segment:** REF Reference Identification (Number of Dials)  
**Position:** 030  
**Loop:** PTD Optional  
**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:**

HI: Not Used  
HU: Not Used  
IU: Required  
MU: Not Used  
REF~IX~6.0~KHMON  
REF~IX~4.2~K1MON~TU^43

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification IX Item Number Number of dials on the meter displayed as X.Y. The notation X.Y means that the meter has X dials to the left of the decimal point and Y dials to the right.	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Number of Dials	X AN 1/30
M	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content Meter Type. See Meter Type (REF~MT) on 814 Enrollment for valid codes. "COMBO" is not a valid code for this element.	X AN 1/80
C	REF04	C040	<b>Reference Identifier</b> To identify one or more reference numbers or identification numbers as specified by the Reference Qualifier Note this is a composite data element. Populate C04001 and C04002. Condition: if this is a time of use meter, this must be sent	O
C	C04001	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification Condition: if this is a time of use meter, this must be sent TU Trial Location Code Time of Use	C ID 2/3
C	C04002	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Condition: if this is a time of use meter, this must be sent 41 Off Peak 42 On Peak 43 Intermediate Peak Shoulder 51 Totalizer Total	C AN 1/30

**Segment:** **REF** Reference Identification (Meter Role)  
**Position:** 030  
**Loop:** PTD Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 REF~JH~A

**Data Element Summary**

<b>Ref.</b>	<b>Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification JH Tag Meter Role	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier A Additive I Ignore S Subtractive	X AN 1/30

**Segment:** **REF** Reference Identification (Meter Number)  
**Position:** 030  
**Loop:** PTD Optional  
**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:**

Meter numbers will contain only uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and significant leading and trailing zeros that are part of the meter number must be present.  
 HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 REF~MG~2222277S

**Data Element Summary**

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

**Segment:** **REF** Reference Identification (Meter Type)  
**Position:** 030  
**Loop:** PTD Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 REF~MT~KHMON

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification MT Meter Ticket Number Meter Type	M ID 2/3
M	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier 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 reported by the metering agent. Valid values can be a combination of the following values:  Type of Consumption K1 Kilowatt Demand (kW) K2 Kilovolt Amperes Reactive Demand (kVAR) K3 Kilovolt Amperes Reactive Hour (kVARh) K4 Kilovolt Amperes (kVA) KH Kilowatt Hour (kWh)  Metering Interval Reported for Billing Purposes nnn Number of minutes from 001 to 999 ANN Annual BIA Bi-annual BIM Bi-monthly DAY Daily MON Monthly QTR Quarterly TOU Time of Use  For Example: KHMON Kilowatt Hours Per Month K1015 Kilowatt Demand per 15 minute interval "COMBO" cannot be used in this segment.	X AN 1/30
C	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content Condition: Required if account has cogeneration COGEN Cogeneration Meter	X AN 1/80

**Segment:** QTY Quantity  
**Position:** 110  
**Loop:** QTY Optional  
**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:**

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 QTY~QD~22348~KH

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	QTY01	673 Quantity Qualifier Code specifying the type of quantity	M ID 2/2
		KA Estimated Quantity is estimated	
		QD Quantity Delivered Quantity is actual	
M	QTY02	380 Quantity Numeric value of quantity	X R 1/15
M	QTY03	C001 Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	O
		Note this is a composite data element, populate C00101	
M	C00101	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 - Kilovolt Amperes	
		KH Kilowatt Hour kWh - Kilowatt Hour	

**Segment:** **MEA** Measurements (Meter Reads)

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:**

- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
- 2 If MEA05 is present, then MEA04 is required.
- 3 If MEA06 is present, then MEA04 is required.
- 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
- 5 Only one of MEA08 or MEA03 may be present.

**Semantic Notes:**

**Comments:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:**

HI: Not Used  
 HU: Not Used  
 IU: Conditional: Send if interval meter has associated monthly begin/end readings.  
 MU: Not Used  
 MEA~AF~~~KH~02500~04000~51

**Data Element Summary**

<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	MEA01	737	<b>Measurement Reference ID Code</b>	<b>O ID 2/2</b>
			Code identifying the broad category to which a measurement applies	
			AA Meter reading-beginning actual/ending actual	
			AE Meter reading-beginning actual/ending estimated	
			AF Actual Total	
			EA Meter reading-beginning estimated/ending actual	
			EE Meter reading-beginning estimated/ending estimated	
M	MEA04	C001	<b>Composite Unit of Measure</b>	<b>X</b>
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
M	C00101	355	<b>Unit or Basis for Measurement Code</b>	<b>M ID 2/2</b>
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			K1 Kilowatt Demand	
			kW - Represents potential power load measured at predetermined intervals	
			K2 Kilovolt Amperes Reactive Demand	
			kVAR - Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter	
			K3 Kilovolt Amperes Reactive Hour	
			kVARh - Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	
			K4 Kilovolt Amperes	

				kVA - Kilovolt Amperes	
			KH	Kilowatt Hour	
				kWh - Kilowatt Hour	
<b>C</b>	<b>MEA05</b>	<b>740</b>	<b>Range Minimum</b>		<b>X R 1/20</b>
			The value specifying the minimum of the measurement range		
			Beginning Reading if applicable		
			Condition: Required unless MEA01 = "AF"		
<b>M</b>	<b>MEA06</b>	<b>741</b>	<b>Range Maximum</b>		<b>X R 1/20</b>
			The value specifying the maximum of the measurement range		
			Ending reading or single reading		

**Segment:** **MEA** Measurements (Meter Multiplier)

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

**Syntax Notes:**

- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
- 2 If MEA05 is present, then MEA04 is required.
- 3 If MEA06 is present, then MEA04 is required.
- 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
- 5 Only one of MEA08 or MEA03 may be present.

**Semantic Notes:**

- 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

**Comments:**

- 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:**

If no meter multiplier, then populate with "1".

HI: Not Used  
 HU: Not Used  
 IU: Required  
 MU: Not Used  
 MEA~~MU~1

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	MEA02	738	<b>Measurement Qualifier</b> Code identifying a specific product or process characteristic to which a measurement applies MU Multiplier Meter Multiplier (Ending Reading - Beginning Reading) * Meter Multiplier = Billed Usage	<b>O ID 1/3</b>
M	MEA03	739	<b>Measurement Value</b> The value of the measurement Meter Multiplier	<b>X R 1/20</b>

**Segment:** **MEA Measurements (Power Factor)**

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

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

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

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

5 Only one of MEA08 or MEA03 may be present.

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

**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:** HI: Not Used  
HU: Not Used  
IU: Required if available  
MU: Not Used  
MEA~~ZA~.95

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	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
M	MEA03	739	Measurement Value The value of the measurement Power Factor	X R 1/20

**Segment:** **MEA** Measurements (Transformer Loss Factor)

**Position:** 160

**Loop:** QTY Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

**Purpose:** To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)

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

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

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

5 Only one of MEA08 or MEA03 may be present.

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

**Comments:** 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:** HI: Not Used

HU: Not Used

IU: Required when the transformer loss is not measured by the meter

MU: Not Used

MEA~~CO~1.02

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	MEA02	738	Measurement Qualifier Code identifying a specific product or process characteristic to which a measurement applies CO Core Loss Transformer Loss Factor	O ID 1/3
M	MEA03	739	Measurement Value The value of the measurement Transformer Loss Factor	X R 1/20

**Segment:** **PTD** **Product Transfer and Resale Detail (Interval Meter Services Detail)**

**Position:** 010

**Loop:** PTD Mandatory

**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:**

HI: Required

HU: Not Used

IU: Required if the CRES requests detail interval information on the Enrollment or Change

MU: Not Used. One PTD loop is required for each meter and/or each unit of measure on the account.

PTD~PM

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	<u>Des.</u> PTD01	<u>Element</u> 521 <u>Product Transfer Type Code</u> Code identifying the type of product transfer PM Physical Meter Information	<u>M</u> <u>ID 2/2</u> Provides detail information for each interval meter or unit of measure.

**Segment:** QTY Quantity  
**Position:** 110  
**Loop:** QTY Optional  
**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:**

HI: Required  
 HU: Not Used  
 IU: Required if the CRES requests detail interval information on the Enrollment or Change  
 MU: Not Used  
 QTY~QD~22348

### Data Element Summary

Ref.	Data Element	Name	Attributes
M	QTY01	673 Quantity Qualifier Code specifying the type of quantity KA Estimated QD Quantity Delivered	M ID 2/2
M	QTY02	380 Quantity Numeric value of quantity	X R 1/15
M	QTY03	C001 Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use)	O
M	C00101	355 Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand K2 Kilovolt Amperes Reactive Demand K3 Kilovolt Amperes Reactive Hour K4 Kilovolt Amperes KH Kilowatt Hour	M ID 2/2

**Segment:** **DTM** **Date/Time Reference (Interval End Time)**  
**Position:** 210  
**Loop:** QTY Optional  
**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:**

HI: Required  
 HU: Not Used  
 IU: Required if the CRES requests detail interval information on the Enrollment or Change  
 MU: Not Used  
 DTM~194~19990115~1500~ET

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time 194 Period End The date/time of the end of the interval	M ID 3/3
M	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8
M	DTM03	337	<b>Time</b> Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) HHMM, where H = Hours and M = Minutes in Eastern Prevailing Time (ET). For this transaction, since X12 does not allow 2400 for time, 2359 will be used to indicate midnight. For example, midnight between October 15th and October 16th will be reflected as 2359 of October 15th.	X TM 4/8
M	DTM04	623	<b>Time Code</b> 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 ET Eastern Time	O ID 2/2

**Segment:** **PTD** Product Transfer and Resale Detail (Unmetered Services)

**Position:** 010

**Loop:** PTD Mandatory

**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:**

HI: Not Used

HU: Conditional – at least one of the PTD~BC or PTD~BD loops must be sent if there are unmetered services on the account

IU: Not Used

MU: Conditional – at least one of the PRD~BC or PTD~BD loops must be sent if there are unmetered services on the account

PTD~BC

PTD~BD

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	<u>Des.</u> PTD01	<u>Element</u> 521 <b>Product Transfer Type Code</b>	<b>M ID 2/2</b>
		Code identifying the type of product transfer	
		BC	Issue - Other Agency
			Unmetered Services Summary
		BD	Issue - Other Department
			Unmetered Services Detail

**Segment:** **DTM** Date/Time Reference (Service Period Start)  
**Position:** 020  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Required  
 IU: Not Used  
 MU: Required if there are unmetered service on the account  
 DTM~150~19990101

**Data Element Summary**

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

**Segment:** **DTM** Date/Time Reference (Service Period End)  
**Position:** 020  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Required  
 IU: Not Used  
 MU: Required if there are unmetered service on the account  
 DTM~151~19990131

**Data Element Summary**

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

**Segment:** **REF** Reference Identification (Product Type)  
**Position:** 030  
**Loop:** PTD Mandatory  
**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:**

HI: Not Used  
 HU: Required  
 IU: Not Used  
 MU: Required if there are unmetered service on the account  
 REF~PRT~LIGHT

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification PRT Product Type EDU Defined Unmetered Service Type	M ID 2/3
M	REF02	127	<b>Reference Identification</b> 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 EDU Web Site.	X AN 1/30

**Segment:** QTY Quantity  
**Position:** 110  
**Loop:** QTY Optional  
**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:** HI: Not Used  
 HU: Required  
 IU: Not Used  
 MU: Required if there are unmetered service on the account  
 QTY~QD~22348~KH

**Data Element Summary**

Ref.	Data Element	Name	Attributes
M	QTY01	673 Quantity Qualifier Code specifying the type of quantity QD Quantity Delivered Quantity is actual Whether unmetered services are estimated, calculated, or actual, they will be coded as actual.	M ID 2/2
M	QTY02	380 Quantity Numeric value of quantity This represents the consumption quantity per device	X R 1/15
M	QTY03	C001 Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use) Note this is a composite data element, populate C00101	O
M	C00101	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 EA Each Ea KH Kilowatt Hour kWh	M ID 2/2

**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.

**Notes:** Required

SE~28~000000001

#### Data Element Summary

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