

# **Ohio Electric Implementation Guideline**

**For**  
**Electronic Data Interchange**

**TRANSACTION SET**

# **814**

## **Change**

### **Request and Response**

**Ver/Rel 004010**

## Summary of Changes

Version 1.0.0  
May 1, 2001

Version 1.5.0  
May 1, 2001

### Initial Release

- Update the description on the 814Change for AMT\*RJ segment per Change Control 3.
- Add code for budget billing per Change Control 5.
- Clarify usage of the AMT\*RJ segment per Change Control 6.
- Clarify the NM1 Notes to say “Request: Required if the change is on the meter level – use ...” instead of “Request: Required – use ...” per Change Control 7.
- Add N1~BT Loop to 814 C – N1 loops: there is no loop to change the customer billing address. The 814 E on the contrary contains a loop N101 = “BT” identifying the customer billing address per Change Control 8.
- Add/Correct Change codes at the header/account level on the 814C per Change Control 9.
- Added the REF~PC which had been omitted in error per Change Control 14.
- Add REFPC as a valid Change Code in REF\*TD segment per Change Control 19.
- 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.
- Add rejection code “ABN” (Duplicate Request) per Change Control 23.
- Add code for Government Aggregation per Change Control 26.
- Fix gray boxes in N1, N3, N4, PER segments for N1~2C and N1~PK per Change Control 29.
- Add new rejection reason code of C02 to Ref 7G to reject 814C’s for end use customer accounts in instances where the change request is from billing type “dual” to billing type “EDU consolidated” and the customer has EDU arrears in excess of Purchase of Receivables contractual limits per Change Control 34
- Add note to N1 segment for Scheduling Coordinator is used for First Energy Only for Market Support Generation per Change Control 35.
- Add “D” as a valid code to the REF03 in the REF\*TD segment to allow for the deletion of certain fields per Change Control 36.
- Correct Gray Box in the 814C for the N1, N3, N4, PER segments for Customer Billing Name and address per Change Control 44.
- Need to add code to notify supplier that MSG has expired for customer or no longer valid.
- 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, N3, N4, PER pages to show which N1 per change control 50
- Updated REF~Q5 gray boxes to show SDID per change control 51

Version 2.0.0  
December 31, 2001

Version 2.1.0  
June 30, 2002

Version 2.2.0  
October 1, 2005

- Added the code W05, requested rate not found or not in effect on the effective date to segment REF\*7G per change control 52
- Changed not in LIN segment to show that AEP, Allegheny, DP&L, and First Energy will **NOT** reject a transaction when sending multiple LIN loops if (1) one LIN loop is bad per change control 53. Accept all the LIN loop changes except for the LIN loops that are bad per Change Control 54.
- Change the gray box for NM1MQ in the REF02 in the REF~TD under the NM1 loop to allow the sending of all codes if less than all 4 are changing per change control 55.
- Added AMT Segment to the 814 change transaction: Monetary Amount (Budget Amount) per change control 57.
- Removed value ESP from REF\*PC per change control 59.
- Add a new Reference ID of AMTBD in the REF\*TD loop and an associated AMTBD loop similar to the current AMTB5 segment to reflect a customer's actual supplier account balance due amount on a monthly basis per change control 64.
- On supplier requests only, modify REF02 and add REF03 line in REF\*PG loop for FirstEnergy use only to insert coding for changing group aggregation code information per change control 66.
- Append words to REFPG change reason code to indicate this can be used for changing the group identification code associated with FirstEnergy's Rate Stabilization Plan in addition to government aggregation per change control 67.

Version 2.3.0  
March 9, 2010

- During 3/3/10 meeting, the OSPO Data Working Group reviewed & confirmed EDI change controls up to and including CC67. All changes in the v2.2.0 redline were accepted and v2.3.0 created as the new baseline for Ohio.

Version 2.4.0  
February 14, 2012

- Added AEP as user of REF02 and REF03 in REP\*PG segment as per EDI Change Control 68
- Added AMT\*KC and AMT\*KZ segments and updated terms for each as per EDI Change Control 69.
- Incorporated AEP's administrative changes as per EDI Change Control 70.
- Incorporated DP&L's administrative changes as per EDI Change Control 71.
- Incorporated Duke Energy Ohio's administrative changes as per EDI Change Control 72.
- Removed SR references as per EDI Change Control 76
- Added DP&L as user of REF02 and REF03 in REP\*PG segment as per EDI Change Control 77.
- Incorporated First Energy's administrative changes as per EDI Change Control 81.
- Correct Duke Energy Ohio's requirements for bill option change as per EDI Change Control 86 Update.

Version 2.5.0  
February 15, 2013

- Implemented Duke Energy Ohio support of government aggregation in the REF\*PG as per EDI Change Control 90.
- Implemented addition of Service Voltage and Loss Factor to the 814C as per EDI Change Control 91. Change Effective 5/25/2012 for First Energy companies only, not used by other EDUs.
- Implemented ability for AEP Ohio to permit CRES to change the Aggregation Group Code in the REF03 of the REFPG without having to re-enroll the customer. Also correct 'GAX' gray box to match 814E.

Version 2.6.0  
March 24, 2014

- Incorporate Change Control 103 Update (Add net meter indicator)
- Incorporate Change Control 105 & 114 (REFLF & REFSV required for AEP & FE)
- Incorporate Change Control 106 (clarify use of REFTD for REFBLT & REFPC changes)

Version 2.6.1  
February 13, 2015

- Correct missing 'A' (data add flag) in REFTD as originally approved in Change Control 103\_Update.

Version 2.6.2  
February 11, 2016

- Incorporated Change Control 127 (AEP OH Net Meter Reporting)
- Incorporated Change Control 129 (Add new reason codes to REF7G)
- Incorporated Change Control 130 (REF46 Not Used in NM1MR)

Version 2.6.3  
February 8, 2018

- Incorporate Change Control 141 (Administrative change request to remove 'Not used by AEP' under REF02 REFPG (Change Aggregation category and/or Group Aggregation Code) in the EDI 814 Change transaction.)
- Incorporate Change Control 145 (Update the 814C to add a REF\*PID segment to be used to update the type of TOU billing program and add the associated change code of REFPID (REF\*TD\*REFPID))
- Incorporate Change Control 149 (Add new reject codes to the 814C to support AEP's TOU Market Transition)

# 814 General Request, Response or Confirmation

Functional Group ID=**GE**

## Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the General Request, Response or Confirmation Transaction Set (814) for use within the context of an Electronic Data Interchange (EDI) environment. This standard can be used to request actions to be performed, to respond to a request for actions to be performed or to confirm information related to actions performed.

## Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.
2. The N1 loop is used to identify the transaction sender and receiver.
3. The N1 loop is used to identify the transaction sender and receiver.
4. The N1 loop is used to identify the transaction sender and receiver.
5. The N1 loop is used to identify the transaction sender and receiver.
6. The N1 loop is used to identify the transaction sender and receiver.
7. The NM1 loop is used to identify the parties associated with the individual line item (LIN), such as an individual consumer in a consolidated third party Consumer Service Provider transaction.

<b>Segment:</b>	<b>ST</b> Transaction Set Header
<b>Position:</b>	010
<b>Loop:</b>	
<b>Level:</b>	Heading
<b>Usage:</b>	Mandatory
<b>Max Use:</b>	1
<b>Purpose:</b>	To indicate the start of a transaction set and to assign a control number
<b>Syntax Notes:</b>	
<b>Semantic Notes:</b>	<b>1</b> 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).
<b>Comments:</b>	
<b>Notes:</b>	Request: Required Response: Required ST~814~000000001

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 814 General Request, Response or Confirmation	M ID 3/3
M	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:** **BGN** Beginning Segment  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of a transaction set  
**Syntax Notes:** 1 If BGN05 is present, then BGN04 is required.  
**Semantic Notes:** 1 BGN02 is the transaction set reference number.  
2 BGN03 is the transaction set date.  
3 BGN04 is the transaction set time.  
4 BGN05 is the transaction set time qualifier.  
5 BGN06 is the transaction set reference number of a previously sent transaction affected by the current transaction.

**Comments:**

**Notes:**

Request: Required  
Response: Required  
BGN~13~199904011956531~19990401 (Request)  
BGN~11~199904020830531~19990401 (Response)

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
M	BGN01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set 11 Response 13 Request	M ID 2/2
M	BGN02	127	<b>Reference Identification</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 all time. 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 AN 1/30
M	BGN03	373	<b>Date</b> Date expressed as CCYYMMDD The transaction creation date - the date that the data was processed by the sender's application system.	M DT 8/8

<b>Segment:</b>	<b>N1</b> Name (8S - EDU)
<b>Position:</b>	040
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> 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. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Request: Required Response: Required N1~8S~EDU COMPANY~1~007909411~~40

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8S Consumer Service Provider (CSP)	
			EDU	
M	N102	93	Name	X AN 1/60
			Free-form name	
			EDU Name	
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	
			EDU D-U-N-S Number or D-U-N-S + 4 Number	
M	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	



<b>Segment:</b>	<b>N1</b> Name (SJ - CRES)
<b>Position:</b>	040
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> 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. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Request: Required Response: Required N1~SJ~CRES COMPANY~9~007909411CRES~~40

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
			CRES	
M	N102	93	Name	X AN 1/60
			Free-form name	
			CRES Name	
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	
			CRES D-U-N-S Number or D-U-N-S + 4 Number	
M	N106	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			40 Receiver	
			41 Submitter	

<b>Segment:</b>	<b>N1</b> Name (RS - Scheduling Coordinator)
<b>Position:</b>	040
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> 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. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Supported by DP&L only
	Request: Required if it is being changed
	Accept Response: Required if it is being changed
	Reject Response: Required unless rejected for invalid EDU account number.
	N1~RS~SCHEDULING COORDINATOR #2~1~345897543

Data Element Summary				
Ref.	Data			
Des.	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 or D-U-N-S + 4 number	

<b>Segment:</b>	<b>N1</b> Name (8R - Customer)
<b>Position:</b>	040
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> 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. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Request: Required Accept Response: Required Reject Response: Required unless rejected for invalid EDU account number.  N1~8R~CUSTOMER NAME N1~8R~CUSTOMER NAME~92~STORE 1234

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

**Segment:** N3 Address Information (8R - Customer Service Address)  
**Position:** 060  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

Used only if there is a change in the service address.

Change of Customer Service Address:

Request: Required

Response: Not Used

N3~123 N MAIN ST~MS FLR 13

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N301	166	Address Information	M AN 1/55
			Address information	
			Customer Service Address	
C	N302	166	Address Information	O AN 1/55
			Address information	
			Customer Service Address Overflow	
			Condition: If there is an overflow, it must be sent.	

**Segment:** **N4 Geographic Location (8R - Customer Service Address)**  
**Position:** 070  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Syntax Notes:** 1 If N406 is present, then N405 is required.  
**Semantic Notes:**  
**Comments:** 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.  
2 N402 is required only if city name (N401) is in the U.S. or Canada.  
**Notes:** Used only if there is a change in the service address.

Change of Customer Service Address:  
Request: Required  
Response: Not Used  
N4~COLUMBUS~OH~43215~US~CO~FRANKLIN

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	N401	19	City Name Free-form text for city name	O AN 2/30
M	N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	O ID 2/2
M	N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States) Postal codes will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	O ID 3/15
M	N404	26	Country Code Code identifying the country US United States	O ID 2/3
C	N405	309	Location Qualifier Code identifying type of location Condition: Will be sent if it is in the EDU's system and is required for tax purposes. CO County/Parish and State Service Address County	X ID 1/2
C	N406	310	Location Identifier Code which identifies a specific location Condition: Will be sent if it is in the EDU's system and is required for tax purposes.	O AN 1/30

**Segment:** **PER** Administrative Communications Contact (8R - Customer Service Address)

**Position:** 080

**Loop:** N1 Optional

**Level:** Heading

**Usage:** Optional

**Max Use:** >1

**Purpose:** To identify a person or office to whom administrative communications should be directed

**Syntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:** Used only if there is a change in the Customer's contact information

Change of Customer Communication Contact:

Request: Required

Response: Not Used

PER~IC~CUSTOMER CONTACT~TE~6145551212

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	PER01	366	Contact Function Code	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			IC Information Contact	
M	PER02	93	Name	O AN 1/60
			Free-form name	
M	PER03	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
M	PER04	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
C	PER05	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if available	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
C	PER06	364	Communication Number	X AN 1/80
			Complete communications number including country or area code when applicable	
			Condition: Required if available	
C	PER07	365	Communication Number Qualifier	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if available	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
C	PER08	364	Communication Number	X AN 1/80

Complete communications number including country or area code when applicable

Condition: Required if available

<b>Segment:</b>	<b>N1 Name (2C - Party to Receive Copy of Bill)</b>
<b>Position:</b>	040
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> 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. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Used to change the name or address of party to receive copies of the bill. Request: Required if it is being changed (Not used by AEP) Accept Response: Required if it is being changed Reject Response: Required if it is being changed unless rejected for invalid EDU account number. N1~2C~NEW NAME

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			Third Party who will receive copies of all bills, not notices.	
		2C	Co-Participant	
			Third Party who will receive copies of all bills, not notices.	
M	N102	93	Name	X AN 1/60
			Free-form name	
			Name of party that is to receive a copy of the bill.	



**Segment:** N3 Address Information (2C - Party to Receive Copy of Bill)  
**Position:** 060  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:** Used only if there is a change in the Party to Receive Copy of Bill address. (Not used by AEP)

Change of Party to Receive Copy of Bill Address:  
 Request: Required if it is being changed  
 Response: Not Used  
 N3~123 N MAIN ST~MS FLR 13

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N301	166	Address Information	M AN 1/55
			Address information	
			Address of party getting a copy of the bill.	
C	N302	166	Address Information	O AN 1/55
			Address information	
			Address of party getting a copy of the bill overflow	
			Condition: If there is an overflow, it must be sent.	

<b>Segment:</b>	<b>N4 Geographic Location (2C - Party to Receive Copy of Bill)</b>
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location. 2 N402 is required only if city name (N401) is in the U.S. or Canada.
<b>Notes:</b>	Used only if there is a change in the Party to Receive Copy of Bill address. (Not used by AEP)
	Change of Party to Receive Copy of Bill Address Address: Request: Required if it is being changed Response: Not Used N4~ANYTOWN~PA~181110001~US N4~MISSISSAUGA~ON~L4W4E4~CA

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
M	N401	19	City Name	O AN 2/30
			Free-form text for city name	
M	N402	156	State or Province Code	O ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
M	N403	116	Postal Code	O ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	
			Postal codes will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
M	N404	26	Country Code	O ID 2/3
			Code identifying the country	
			For country codes not listed, please refer to ISO 3166, a version of which can be found at <a href="http://treetops.commerce.net/research/stats/countrycodes.html">http://treetops.commerce.net/research/stats/countrycodes.html</a> .	
			US United States	

<b>Segment:</b>	<b>PER</b> Administrative Communications Contact (2C - Party to Receive copy of Bill)
<b>Position:</b>	080
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To identify a person or office to whom administrative communications should be directed
<b>Syntax Notes:</b>	<b>1</b> If either PER03 or PER04 is present, then the other is required. <b>2</b> If either PER05 or PER06 is present, then the other is required. <b>3</b> If either PER07 or PER08 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Used only if there is a change in the Customer's Party to Receive Copy of Bill contact information(Not used by AEP)  Change of Customer Communication Contact: Request: Required if it is being changed Response: Not Used

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	PER01	366	<b>Contact Function Code</b> Code identifying the major duty or responsibility of the person or group named IC Information Contact	M ID 2/2
M	PER02	93	<b>Name</b> Free-form name	O AN 1/60
M	PER03	365	<b>Communication Number Qualifier</b> Code identifying the type of communication number EM Electronic Mail FX Facsimile TE Telephone	X ID 2/2
M	PER04	364	<b>Communication Number</b> Complete communications number including country or area code when applicable	X AN 1/80
C	PER05	365	<b>Communication Number Qualifier</b> Code identifying the type of communication number Condition: Required if available EM Electronic Mail FX Facsimile TE Telephone	X ID 2/2
C	PER06	364	<b>Communication Number</b> Complete communications number including country or area code when applicable Condition: Required if available	X AN 1/80
C	PER07	365	<b>Communication Number Qualifier</b> Code identifying the type of communication number Condition: Required if available EM Electronic Mail FX Facsimile TE Telephone	X ID 2/2
C	PER08	364	<b>Communication Number</b> Complete communications number including country or area code when applicable	X AN 1/80

Complete communications number including country or area code when applicable

Condition: Required if available

**Segment:** **N1** Name (BT - Customer Billing Name)  
**Position:** 040  
**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:** Request: Required if it is being changed  
Accept Response: Required if it is being changed  
Reject Response: Required if it is being changed unless rejected for invalid EDU account number.  
N1~BT~ACCOUNTS PAYABLE DIVISION

Data Element Summary				
	Ref. Des.	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	
			BT	Bill-to-Party
				Customer Billing Name
M	N102	93	Name	X AN 1/60
			Free-form name	
			Name associated with billing address	

**Segment:** **N3** Address Information (BT - Customer Billing Address)  
**Position:** 060  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

Request: Required if it is being changed  
 Response: Not Used  
 N3~123 N MAIN ST~MS FLR 13

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N301	166	Address Information	M AN 1/55
			Address information	
			Billing Address	
C	N302	166	Address Information	O AN 1/55
			Address information	
			Billing Address Overflow	
			Condition: If there is an overflow, it must be sent.	

**Segment:** **N4** Geographic Location (BT - Customer Billing Address)  
**Position:** 070  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the geographic place of the named party  
**Syntax Notes:** 1 If N406 is present, then N405 is required.  
**Semantic Notes:**  
**Comments:** 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.  
2 N402 is required only if city name (N401) is in the U.S. or Canada.  
**Notes:** Request: Required if it is being changed  
Response: Not Used  
N4~ANYTOWN~OH~19999~US  
N4~ANYTOWN~OH~199990001~US  
N4~MISSISSAUGA~ON~L4W4E4~CA

#### Data Element Summary

	Ref.	Data		
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N401	19	City Name	O AN 2/30
			Free-form text for city name	
M	N402	156	State or Province Code	O ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
M	N403	116	Postal Code	O ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	
			Postal codes will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	
M	N404	26	Country Code	O ID 2/3
			Code identifying the country	
			For country codes not listed, please refer to ISO 3166, a version of which can be found at <a href="http://treetops.commerce.net/research/stats/countrycodes.html">http://treetops.commerce.net/research/stats/countrycodes.html</a> .	
			US United States	

**Segment:** **PER** Administrative Communications Contact (BT - Customer Billing Address)

**Position:** 080

**Loop:** N1 Optional

**Level:** Heading

**Usage:** Optional

**Max Use:** >1

**Purpose:** To identify a person or office to whom administrative communications should be directed

**Syntax Notes:** 1 If either PER03 or PER04 is present, then the other is required.

2 If either PER05 or PER06 is present, then the other is required.

3 If either PER07 or PER08 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:**

Request: Required if it is being changed

Response: Not Used

Used to convey information about the customer at the billing address.

PER~IC~ACCOUNTING~TE~6145551212

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
M	PER01	366	<b>Contact Function Code</b>	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			IC Information Contact	
M	PER02	93	<b>Name</b>	O AN 1/60
			Free-form name	
M	PER03	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
M	PER04	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	
C	PER05	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Condition: Required if available	
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
C	PER06	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	
			Condition: Required if available	
C	PER07	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if available	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
C	PER08	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	



Condition: Required if available

**Segment:** **N1** Name (PK - Party to Receive Notices)  
**Position:** 040  
**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:** Used to change the address of the party to receive copies of any notices.  
Request: Required if it is being changed(Not used by AEP)  
Accept Response: Required if it is being changed  
Reject Response: Required if it is being changed unless rejected for invalid EDU account number.  
N1~PK~ANOTHER NAME

#### Data Element Summary

	<u>Ref.</u> <u>Des.</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 PK Party to Receive Copy Third party that is to receive a copy of all notices (not bills) to the end use customer.	M ID 2/3
M	N102	93	Name Free-form name Name of third party that is to receive copy of all notices.	X AN 1/60

**Segment:** **N3** Address Information (PK - Party to Receive Notices)  
**Position:** 060  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify the location of the named party  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

Used only if there is a change in the Party to Receive Notices address. (Not used by AEP)

Change of Party to Receive Notices Address:  
 Request: Required if it is being changed  
 Response: Not Used  
 N3~123 N MAIN ST~MS FLR 13

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N301	166	Address Information Address information Third party notice address.	M AN 1/55
C	N302	166	Address Information Address information Third party notice address overflow Condition: If there is an overflow, it must be sent.	O AN 1/55

<b>Segment:</b>	<b>N4 Geographic Location (PK - Party to Receive Notices)</b>
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location. 2 N402 is required only if city name (N401) is in the U.S. or Canada.
<b>Notes:</b>	Used only if there is a change in the Party to Receive Notices address. (Not used by AEP)
	Change of Party to Receive Copy of Bill Address Address: Request: Required if it is being changed Response: Not Used N4~ANYTOWN~PA~181110001~US N4~MISSISSAUGA~ON~L4W4E4~CA

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>		
	<b>Des.</b>	<b>Element</b>	<b>Name</b>	<b>Attributes</b>
M	N401	19	<b>City Name</b> Free-form text for city name	O AN 2/30
M	N402	156	<b>State or Province Code</b> Code (Standard State/Province) as defined by appropriate government agency Condition: Required if applicable.	O ID 2/2
M	N403	116	<b>Postal Code</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States) Postal codes will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	O ID 3/15
M	N404	26	<b>Country Code</b> Code identifying the country For country codes not listed, please refer to ISO 3166, a version of which can be found at <a href="http://treetops.commerce.net/research/stats/countrycodes.html">http://treetops.commerce.net/research/stats/countrycodes.html</a> . US United States	O ID 2/3

**Segment:** **PER** Administrative Communications Contact (PK - Party to Receive Notices)  
**Position:** 080  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To identify a person or office to whom administrative communications should be directed  
**Syntax Notes:**

- 1 If either PER03 or PER04 is present, then the other is required.
- 2 If either PER05 or PER06 is present, then the other is required.
- 3 If either PER07 or PER08 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:**

Used only if there is a change in the Customer's Party to Receive Notices contact information(Not used by AEP)

Change of Customer Communication Contact:

Request: Required if it is being changed

Response: Not Used

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
M	PER01	366	<b>Contact Function Code</b>	M ID 2/2
			Code identifying the major duty or responsibility of the person or group named	
			IC Information Contact	
M	PER02	93	<b>Name</b>	O AN 1/60
			Free-form name	
M	PER03	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
M	PER04	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	
C	PER05	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if available	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
C	PER06	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when applicable	
			Condition: Required if available	
C	PER07	365	<b>Communication Number Qualifier</b>	X ID 2/2
			Code identifying the type of communication number	
			Condition: Required if available	
			EM Electronic Mail	
			FX Facsimile	
			TE Telephone	
C	PER08	364	<b>Communication Number</b>	X AN 1/80
			Complete communications number including country or area code when	

applicable

Condition: Required if available

<b>Segment:</b>	<b>LIN</b> Item Identification
<b>Position:</b>	010
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify basic item identification data
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 If either LIN04 or LIN05 is present, then the other is required.</li> <li>2 If either LIN06 or LIN07 is present, then the other is required.</li> <li>3 If either LIN08 or LIN09 is present, then the other is required.</li> <li>4 If either LIN10 or LIN11 is present, then the other is required.</li> <li>5 If either LIN12 or LIN13 is present, then the other is required.</li> <li>6 If either LIN14 or LIN15 is present, then the other is required.</li> <li>7 If either LIN16 or LIN17 is present, then the other is required.</li> <li>8 If either LIN18 or LIN19 is present, then the other is required.</li> <li>9 If either LIN20 or LIN21 is present, then the other is required.</li> <li>10 If either LIN22 or LIN23 is present, then the other is required.</li> <li>11 If either LIN24 or LIN25 is present, then the other is required.</li> <li>12 If either LIN26 or LIN27 is present, then the other is required.</li> <li>13 If either LIN28 or LIN29 is present, then the other is required.</li> <li>14 If either LIN30 or LIN31 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 LIN01 is the line item identification
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 See the Data Dictionary for a complete list of IDs.</li> <li>2 LIN02 through LIN31 provide for fifteen different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.</li> </ol>
<b>Notes:</b>	<p>Response/LIN: There must be a response for each LIN request.</p> <p>Multiple Changes: Within one account/service delivery point (AEP only). DP&amp;L and First Energy will accept multiple LIN loops. If one LIN loop is bad, For multiple LIN loops that are inter-related request to send in (1) LIN loop. The following fields should be sent in combination with one LIN/NM1 loop. Any other fields not listed below should be rejected.</p> <p>Duke Energy Ohio will accept only one change per LIN loop, multiple LIN Loops may be sent; however, if any of the changes are rejected, then the entire 814 change transaction must be rejected. A rejection reason must be provided for each invalid change.</p> <p>814C - From Dual to EDC Rate Ready Following REF*TD* codes must be sent: REF*TD*REFBLT, REF*TD*RFPC, REF*TD*REFRB, and RF*TD*AMTB5 (when applicable) Note: REF*TD*REFRB is in the NM1 Loop Following fields must be sent: REF*RB, REF*BLT, REF*PC, and AMT*B5 (when applicable) (Duke Energy Ohio does not accept REF*TD*REFPC under bill option change)</p> <p>814C - From Rate Ready to Dual Following REF*TD codes must be sent: REF*TD*REFBLT and REF*TD*REFPC Following fields must be sent: REF*BLT, REF*PC (Duke Energy Ohio does not accept REF*TD*REFPC under bill option change)</p> <p>Request: Required Response: Required LIN~CECE1999123108590001~SH~EL~SH~CE</p>

## Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	LIN01	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set On the request, this is a unique tracking number for each line item (LIN) in this transaction. This number must be unique over all time. This number must be returned on the response transaction in the same element. Tracking numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded.	O AN 1/20
M	LIN02	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) SH Service Requested	M ID 2/2
M	LIN03	234	<b>Product/Service ID</b> Identifying number for a product or service EL Electric Service	M AN 1/48
M	LIN04	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) SH Service Requested	X ID 2/2
M	LIN05	234	<b>Product/Service ID</b> Identifying number for a product or service CE Energy Services SI Summary Interval Request to obtain summary level data for an interval customer. This may be sent with an Energy Services Enrollment or on a change transaction. (Not used by Duke Energy Ohio – CRES must send REF17 under CE service.)	X AN 1/48



**Segment:** **ASI** Action or Status Indicator

**Position:** 020

**Loop:** LIN Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 1

**Purpose:** To indicate the action to be taken with the information provided or the status of the entity described

**Syntax Notes:**

**Semantic Notes:**

**Comments:**

**Notes:**

Identifies the action to be taken or the status of a requested action for the service identified in the LIN segment.

The Response must be a Reject (U) or an Accept (WQ); however, the WQ will mean either that the entity accepts the change and will make the change in its system, or that the entity acknowledges the change, but will not necessarily modify its own system.

Request: Required

Accept Response: Required

Reject Response: Required

ASI~7~001 (Request)

ASI~WQ~001 (Accept Response)

ASI~U~001 (Reject Response)

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	ASI01	306	Action Code	M ID 1/2
			Code indicating type of action	
			7 Request	
			U Reject	
			WQ Accept	
M	ASI02	875	Maintenance Type Code	M ID 3/3
			Code identifying the specific type of item maintenance	
			001 Change	

<b>Segment:</b>	<b>REF</b> Reference Identification (Q5 = SDID Number)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	12
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	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. Max use of one per transaction REF~Q5~987654

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

<b>Segment:</b>	<b>REF</b> Reference Identification (CRES Account Number)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>Account numbers will only contain uppercase letters (A to Z) and digits (0 to 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.</p> <p>Change Valid: From CRES to Utility</p> <p>Request: Required if it was provided on the Enrollment or Change  Accept Response: Required if it was provided on the Enrollment or Change  Reject Response: Required if it was provided on the Enrollment or Change  REF~11~2348400586</p>

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

<b>Segment:</b>	<b>REF</b> Reference Identification (EDU Account Number)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	<p>Account numbers will only contain uppercase letters (A to Z) and digits (0 to 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.</p> <p>When changing the Utility's account number, the previous account number must appear in the REF~45 segment.</p> <p>Change Valid: From Utility to CRES</p> <p>Request: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number.</p> <p>Accept Response: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number. First Energy will send Customer Number</p> <p>Reject Response: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number. First Energy will send Customer Number</p> <p>REF~12~2931839200</p>

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

<b>Segment:</b>	<b>REF</b> Reference Identification (Summary Interval Indicator)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>Used only to change type of information being received for interval accounts. (Duke Energy Ohio requires this to be sent under LIN = CE)</p> <p>Change Valid: From Non-Metering Party to Metering Party</p> <p>Change of Summary Interval Indicator: Request: Required Response: Not Used All other Change Transactions: Not Used REF~17~SUMMARY</p>

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			17 Client Reporting Category	
				Used to convey a request to receive summary only information, or detail and associated summary information for this interval account.
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			DETAIL Detail	
				Metering party will send both summary and detail data for this interval account.
			SUMMARY Summary	
				Metering party will send only summary level data for this interval account.

<b>Segment:</b>	<b>REF</b> Reference Identification (Status Reason)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<b>1</b> At least one of REF02 or REF03 is required. <b>2</b> If either C04003 or C04004 is present, then the other is required. <b>3</b> If either C04005 or C04006 is present, then the other is required.
<b>Semantic Notes:</b>	<b>1</b> REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	Request: Not Used Accept Response: Required when status information must be conveyed. Reject Response: Not Used REF~1P~A13~CHANGE NOT SUPPORTED

Data Element Summary				
	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			1P Accessorial Status Code	
			Used on the response when the request is accepted, and additional status information must be provided.	
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			A13 Other	
			Explanation Required in REF03. When A13 is used, an email should be sent to the Ohio Deregulation list serve to determine if a new code needs to be established.	
			ABN Duplicate Request Received	
C	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Used to further describe the status reason code sent in REF02. Code "A13" requires a text explanation in this element.	

<b>Segment:</b>	<b>REF</b> Reference Identification (Previous EDU Account Number)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>Account numbers will only contain uppercase letters (A to Z) and digits (0 to 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.</p> <p>Used only if the EDU changed the account number.</p> <p>Change valid from EDU to CRES.</p> <p>Request: Required if the Account Number is being changed. Not used by AEP.</p> <p>Response: Not Used</p> <p>REF~45~1105687500</p>

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

**Segment:** **REF** **Reference Identification (Rejection Reason)**  
**Position:** 030  
**Loop:** LIN Optional  
**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:**

Request: Not Used  
 Accept Response: Not Used  
 Reject Response: Required  
 REF~7G~A13~ADDITIONAL REASON TEXT HERE

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			7G	Data Quality Reject Reason
				Reject reasons associated with a reject status notification.
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			008	Account exists but is not active
				Valid for LIN05 = CE, SI
			A13	Other
				Valid for LIN05 = CE, SI
				Explanation Required in REF03. When A13 is used, an email should be sent to the Ohio Deregulation List serve to determine if a new code needs to be established.
			A74	CRES Account Invalid or not found
				Valid for LIN05 = CE, SI if customer is served by a CRES
			A76	Utility Account Invalid or Not Found
				Valid for LIN05 = CE, SI
				This code may not be used as a rejection reason if the correct previous EDU account number was submitted and the EDU changed account numbers (i.e., re-route) within the last 60 days.
			A85	Customer is not the customer of the Requestor
				Valid for LIN05 = CE, SI
			ACI	Action Code (ASI01) Invalid
				Valid for LIN05 = CE, SI
			ANK	Invalid Source of Information
				Valid for LIN05 = CE, SI
				Receiver of request does not provide requested service and/or does not have requested information.
			API	Required Information Missing (REF03 Required)
				Valid for LIN05 = CE, SI
				Explanation Required in REF03



ATI	Account Type Invalid Valid for LIN05 = CE
C02	Type of account cannot be enrolled in TOU program Customer is on Credit Hold Valid for LIN05 = CE
C11	Customer arrears exceeds limits outlined in purchase of receivables contract between the EDU and CRES . Change Reason (REF~TD) Missing or Invalid Valid for LIN05 = CE, SI,
D76	Duns Number Invalid or Not Found Valid for LIN05 = CE, SI
FRB	Incorrect Billing Type (REF~BLT) Requested Valid for LIN05 = CE
IBP	Invalid Billing Program ID Valid for LIN05 = CE Billing program ID requested is nor valid for AEP's TOU program
IMR	Invalid Meter Register Valid for LIN05 = CE No AMI meter on the account, which is required to enroll in AEP's TOU program
M76	Invalid Meter Valid for LIN05 = CE, SI
MTI	Maintenance Type Code (ASI02) Invalid Valid for LIN05 = CE, SI
NAM	No AMI meter Valid for LIN05 = CE No AMI meter on the account, which is required to enroll in AEP's TOU program
NIA	Not Interval Account Valid for LIN05 = SI Requested account for summary interval is not interval account.
PPC	Pending Program Change Valid for LIN05 = CE Pending request not yet effective. Only one request per billing period.
PPL	Pending Liability Change Valid for LIN05 = CE Enrollment request is pending
SDP	Invalid Service Delivery Point Identifier Valid for LIN05 = CE, SI
W05	Requested rate not found or not in effect on the effective date Valid for LIN05 = CE

<b>C</b>	<b>REF03</b>	<b>352</b>	<b>Description</b>	<b>X</b>	<b>AN 1/80</b>
A free-form description to clarify the related data elements and their content					
Used to further describe the status reason code sent in REF02. a text explanation in this element.					

<b>Segment:</b>	<b>REF</b> Reference Identification (Billing Type)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<b>1</b> At least one of REF02 or REF03 is required. <b>2</b> If either C04003 or C04004 is present, then the other is required. <b>3</b> If either C04005 or C04006 is present, then the other is required.
<b>Semantic Notes:</b>	<b>1</b> REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	Used only if changing the billing type  Change Valid: From EDU to CRES only if the EDU is providing EDU Consolidated Billing and the customer is more than 90 days past due; in which case the EDU may send a change request for Dual Billing.  From CRES to EDU anytime  Change of Billing Type:  Request: Required if it is being changed Response: Not Used 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	M ID 2/3
			Code qualifying the Reference Identification	
			BLT	Billing Type
				Indicates whether the bill is consolidated by the EDU or CRES, or whether each party will render their own bill.
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			DUAL	Dual Billing
				Each party bills the customer for its portion
			ESP	CRES Consolidated Billing
				The CRES bills the customer
			LDC	EDU Consolidated Billing
				The EDU bills the customer

**Segment:** **REF** Reference Identification (Billing Cycle)  
**Position:** 030  
**Loop:** LIN Optional  
**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:**

Used only if changing the billing cycle.

Change Valid: From billing party to non-billing party only.

Request: Required if it is being changed  
Response: Not used  
REF~BF~1

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			BF Billing Center Identification	
			EDU Billing Cycle. Cycle number when the billing will be rendered.	
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Billing Cycle Number	

**Segment:** **REF** Reference Identification (KY=Special Meter Configuration)  
**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:**  
**Notes:**

Used only if changing the Special Meter Configuration  
Change Valid: From EDU to CRES (AEP Ohio & FirstEnergy ONLY)

Request: Required if it is being changed  
Response: Not used  
REF~KY~NETMETER

Data Element Summary				
	Ref. Des.	Data Element	Name	X12 Attributes
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			KY Site Specific Procedures, Terms, and Conditions	
			Special Meter Configuration	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			NETMETER Net Meter	

<b>Segment:</b>	<b>REF</b> Reference Identification (Party Calculating Charges)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	<p>Used only if changing the Party Calculating Charges</p> <p>Change Valid: From EDU to CRES only if the EDU is providing EDU Consolidated Billing and the customer is more than 90 days past due; in which case the EDU may send a change request for Dual Billing.</p> <p>From CRES to EDU anytime</p> <p>Change of Billing Type:</p> <p>Request: Required if it is being changed</p> <p>Response: Not Used</p> <p>REF~PC~LDC</p>

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

**Segment:** **REF** **Reference Identification (Program Identifier)**

**Position:** 030

**Loop:** LIN Optional

**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:**

Used only if changing the Program Indicator

Change Valid: From CRES to EDU (AEP Only)

Request: Required if it is being changed

Response: Not Used

Only 1 PID segment may be sent on each 814 Change Request

REF~PID~TOD2

REF~PID~NSC

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b>	M ID 2/3
			Code qualifying the Reference Identification	
			PID	Program Identification Number
				Program Identifier
M	REF02	127	<b>Reference Identification</b>	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			TOD2	2 Tier Time-of-Day
				Used to enroll customer in TOD2
			NTOD2	Not 2 Tier Time-of-Day
				Used to remove a customer from TOD2
			CPP3	3 Tier plus Critical Peak Pricing
				Used to enroll customer in CPP3
			NCPP3	Not 3 Tier plus Critical Peak Pricing
				Used to remove a customer from CPP3
			SC	Smart Cooling
				Used to enroll customer in SC
			NSC	Not Smart Cooling
				Used to remove a customer from Smart Cooling

<b>Segment:</b>	<b>REF</b>	<b>Reference Identification (Government Aggregation)</b>
<b>Position:</b>	030	
<b>Loop:</b>	LIN	Optional
<b>Level:</b>	Detail	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	>1	
<b>Purpose:</b>	To specify identifying information	
<b>Syntax Notes:</b>	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.
<b>Semantic Notes:</b>	1	REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>		
<b>Notes:</b>	<p>Used only if changing the Aggregation. DP&amp;L will only support changing the REF*PG for contracts in pending enrollment status where the first supplier bill has not been issue due to system handling of aggregations. A drop and new enrollment or a single new enrollment would be necessary for changes to active contracts. Duke Energy Ohio supports the REF*PG change 7 days or more after a GAG enrollment becomes effective.</p> <p>Change Valid:  From EDU to CRES: Not Used  From CRES to EDU: Anytime</p> <p>Change of Aggregation:  Request: Required if it is being changed  Response: Not Used  REF~PG~GAG</p>	

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification PG Product Group Aggregation	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 GAG Government Aggregation (First Energy, AEP, Duke Energy Ohio and DP&L) AGG Group (Non-Government) Aggregation (First Energy use only) GAX Government Aggregation – (DP&L exclude RSC and AEP to exclude POLR Rider Charges)	X AN 1/30
C	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content Conditional – required for First Energy when the account is associated with an aggregation. Required for DP&L when the account is associated with a governmental aggregation ONLY. Not used by Duke Energy Ohio. The REF03 will contain the Group Aggregation Code provided by the EDU. If the information provided in this loop does not meet validation criteria, a reject response will be sent with a reject code of A13 in a REF*7G loop. The explanation will state “Invalid group aggregation code”. The Code would be rejected due to the designated Group Aggregation Code not being associated with the supplier. If the request includes multiple change types, i.e. rate change and group code change, and any of the changes are rejected the entire request will be rejected with a rejection reason provided for each invalid change.	X AN 1/80

<b>Segment:</b>	<b>REF</b> Reference Identification (Reason for Change)
<b>Position:</b>	030
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	<p>Request: Required if change is at an account (LIN) or header level</p> <p>Response: Not Used</p> <p>For AEP, DP&amp;L, and FirstEnergy, to change a billing type, multiple REF~TD segments must be sent (REF~TD~REFBLT and REF~TD~REFPC) along with the associated REF~BLT and REF~PC segments (and REF~TD~REFRB and REF~RB segments in the NM1 loop if changing to rate ready):</p> <p>Example of Rate Ready to Bill Ready:</p> <p>REF~BLT~LDC  REF~PC~ DUAL  REF~TD~REFBLT  REF~TD~REFPC  NM1`MQ~3~~~~~32~ALL</p> <p>Example of Bill Ready to Rate Ready:</p> <p>REF~BLT~LDC  REF~PC~LDC  REF~TD~REFBLT  REF~TD~REFPC  NM1`MQ~3~~~~~32~ALL  REF~TD~REFRB  REF~RB~CRES01</p> <p>For Duke Energy, OH, only one REF~TD segment will be accepted. A REF~TD~REFBLT segment should be sent along with the REF~BLT and REF~PC segments (and REF~RB segment in the NM1 loop if changing to rate ready):</p> <p>Example of Rate Ready to Bill Ready:</p> <p>REF~PC~LDC  REF~BLT~DUAL  REF~TD~REFBLT  NM1`MQ~3~~~~~32~ALL</p> <p>Example of Bill Ready to Rate Ready:</p> <p>REF~PC~LDC  REF~BLT~LDC  REF~TD~REFBLT  NM1`MQ~3~~~~~32~ALL  REF~RB~CRES01  REF~TD~REFBLT</p>

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>		<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	



			TD	Reason for Change	
M	REF02	127	<b>Reference Identification</b>		X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			AMTB5	Change CRES Budget Billing Status (First Energy Only) – Must have an associated AMT~B5 or REF~RB segment	
			AMTBD	Change CRES Total Account Balance Due (First Energy & DP&L only) – Must have associated AMT~BD segment	
			AMTKC	Change Peak Load Contribution	
			AMTKZ	Change Network Service Peak Load	
			DTM150	Change Effective Start Date	
			DTM151	Change Effective End Date	
			N12C	Change Party to Receive Copy of Bill Name and/or Address (Not used by AEP)	
			N18R	Change Customer Name and/or Service Address	
			N1BT	Change Customer Billing Name and/or Address	
			N1PK	Change Party to Receive Notices Name and/or Service Address(Not used by AEP)	
			N1RS	Change Scheduling Coordinator(DP&L only)	
			REF11	Change CRES Account Number	
			REF12	Change EDU Account Number(Not used by AEP)	
			REF17	Change Interval Indicator	
			REFBF	Change Bill Cycle Number	
			REFBLT	Change Bill Type	
			REFKY	Change Special Meter Configuration (AEP Ohio & FirstEnergy Only)	
			REFPC	Change Party Calculating the Charges  Duke Energy Ohio does NOT support. CRES to send only the REF~TD~REFBLT but must include both the REFBLT and REFPC segments. See above gray box under REF~TD for additional information.	
			REFPG	Change Aggregation category and/or Group Aggregation Code	
			REFQ5	Change AEP's SDID Number(AEP Only)	
C	REF03	352	<b>Description</b>		X AN 1/80
			A free-form description to clarify the related data elements and their content		
			A	Indicates the data to be added Required if adding the following:	
				• Special Meter Configuration (Net Meter) - REFKY	
			D	Indicates the data to be deleted Required if deleting the following address types:	
				• Party to Receive copy of bills -N12C	
				• Billing Address –N1BT	
				• Party to Receive copy of notices (Not bills) –N1PK	
				• Government Aggregation – REFPG	
				• Special Meter Configuration (Net Meter) - REFKY	

<b>Segment:</b>	<b>DTM</b> Date/Time Reference (Effective Date)
<b>Position:</b>	040
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify pertinent dates and times
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of DTM02 DTM03 or DTM05 is required.</li> <li>2 If DTM04 is present, then DTM03 is required.</li> <li>3 If either DTM05 or DTM06 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Request: Required on EDU Initiated Request, Not Used on CRES Initiated Request Response: Required on EDU Initiated Response, Not Used on CRES Initiated Response DTM~152~19990115

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</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	
			152 Effective Date of Change	
			The date this change will take effect or has taken effect.	
M	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Date expressed as CCYYMMDD	

<b>Segment:</b>	<b>DTM</b> <b>Date/Time Reference (Service Period Start)</b>
<b>Position:</b>	040
<b>Loop:</b>	LIN     Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify pertinent dates and times
<b>Syntax Notes:</b>	<b>1</b> At least one of DTM02 DTM03 or DTM05 is required. <b>2</b> If DTM04 is present, then DTM03 is required. <b>3</b> If either DTM05 or DTM06 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Used only if changing the start date of power flow.  Change Valid: From EDU to CRES only  Change of Service Period Start Date: Request: Required if the date is more than 5 calendar days (3 calendar days for First Energy) different than the original Estimated Date returned on the Enrollment Response. DTM~150~19990115

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</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	
			150                      Service Period Start	
			The date energy is expected to flow for this customer from the CRES.	
M	DTM02	373	Date	X   DT 8/8
			Date expressed as CCYYMMDD	
			Date expressed as CCYYMMDD	

<b>Segment:</b>	<b>DTM</b> Date/Time Reference (Service Period End Date)
<b>Position:</b>	040
<b>Loop:</b>	LIN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify pertinent dates and times
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of DTM02 DTM03 or DTM05 is required.</li> <li>2 If DTM04 is present, then DTM03 is required.</li> <li>3 If either DTM05 or DTM06 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	<p>Used only if changing the end date of power flow.</p> <p>Change Valid: From EDU to CRES only.</p> <p>Change of Service Period End Date: Request: Required if the date is more than 5 calendar days (3 calendar days for First Energy) different than the original Estimated Date returned on the Drop Response.</p> <p>Response: Not Used DTM~151~19990215</p>

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</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	
			Estimated date that the service with the CRES will end.	
M	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Date expressed as CCYYMMDD	

**Segment:** **AMT** Monetary Amount  
**Position:** 060  
**Loop:** LIN Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To indicate the total monetary amount  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

Conditional: Required if EDU is First Energy and customer is on budget billing, not used for other EDUs  
 AMT~B5~100.00

#### Data Element Summary

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
M	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			B5 Budgeted	
M	AMT02	782	Monetary Amount	M R 1/8
			Monthly Budget Amount	

**Segment:** **AMT** Monetary Amount  
**Position:** 060  
**Loop:** LIN Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To indicate the total monetary amount  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

Conditional: Required if EDU is First Energy or DP&L and customer is on budget  
 billing, not used for other EDUs  
 AMT~BD~100.00

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			BD Balance Due	
M	AMT02	782	Monetary Amount	M R 1/8
			Customer's actual CRES account balance due	

<b>Segment:</b>	<b>AMT</b> Monetary Amount (KC=Peak Load Contribution)
<b>Position:</b>	060
<b>Loop:</b>	LIN
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To indicate the total monetary amount
<b>Syntax Notes:</b>	
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	EDU to CRES Request: Required for PJM Participants when this field changes Accept Response: Not Used Reject Response: Not Used  CRES to EDU: Not Used  Zero values may be sent if the EDU is, in fact, stating that there is no contribution for this customer's account.  For AEP - The value provided is at the Service Delivery Identifier Number level.  <b>Example:</b> AMT*KC*752

Data Element Summary					
	Ref. Des.	Data Element	Name	X12 Attributes	
Must Use	AMT01	522	Amount Qualifier Code	M	ID 1/3
			Code to qualify amount		
			KC	Obligated	
				Peak Load Contribution (a.k.a. Capacity Contribution, 5CP, or Load Responsibility): Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM peak).	
Must Use	AMT02	782	Monetary Amount	M	R 1/18
			Monetary amount		
			Peak Load Contribution		

<b>Segment:</b>	<b>AMT</b> Monetary Amount (KZ=Network Service Peak Load)
<b>Position:</b>	060
<b>Loop:</b>	LIN
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To indicate the total monetary amount
<b>Syntax Notes:</b>	
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	EDU to CRES Request: Required for PJM Participants when this field changes Accept Response: Not Used Reject Response: Not Used  CRES to EDU: Not Used  Zero values may be sent if the EDU is, in fact, stating that there is no contribution for this customer's account.  For AEP - The value provided is at the Service Delivery Identifier Number level. 
<b>Example:</b>	AMT*KZ*752

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	AMT01	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			KZ	Mortgager's Monthly Obligations
				Network Service Peak Load (a.k.a. Transmission Contribution or 1CP): Customer's peak load contribution provided to PJM for the Transmission Service calculation (coincident with LDC peak).
Must Use	AMT02	782	Monetary Amount	M R 1/18
			Monetary amount	
			Network Service Peak Load	



<b>Segment:</b>	<b>NM1</b> Individual or Organizational Name (Meter Level Information)
<b>Position:</b>	080
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To supply the full name of an individual or organizational entity
<b>Syntax Notes:</b>	1 If either NM108 or NM109 is present, then the other is required. 2 If NM111 is present, then NM110 is required.
<b>Semantic Notes:</b>	1 NM102 qualifies NM103.
<b>Comments:</b>	1 NM110 and NM111 further define the type of entity in NM101.
<b>Notes:</b>	Request: Required if the change is at the meter level- use "ALL", "UNMETERED", or provide one NM1 Loop for each meter number Response: Not Used NM1~MQ~3~~~~~32~1234568MG NM1~MQ~3~~~~~93~UNMETERED NM1~MQ~3~~~~~93~ALL

Data Element Summary				
	Ref.	Data		
	Des.	Element	Name	Attributes
M	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			MA	Party for whom Item is Ultimately Intended
				Meter Addition - use when adding a meter to an existing account
			MQ	Metering Location
				Meter Level Information Change - use when changing Meter level Information or all Meter Attribute(s) for an existing Meter.
			MR	Medical Insurance Carrier
				Meter Removal - use when removing a meter from an existing account.
			MX	Juvenile Witness
				Meter Exchange - use when exchanging a meter.
M	NM102	1065	Entity Type Qualifier	M ID 1/1
			Code qualifying the type of entity	
			3	Unknown
M	NM108	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			32	Assigned by Property Operator
				Meter Number
			93	Code assigned by the organization originating the transaction set
				This code used when a Meter Number is NOT provided in NM109 (i.e., when NM109 contains "ALL" or "UNMETERED").
M	NM109	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Meter Number or, UNMETERED – for Unmetered Services or, ALL - for ALL meters	

Meter numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and leading and trailing zeros that are part of the meter number must be present.

<b>Segment:</b>	<b>REF</b> Reference Identification (Previous Meter Number)
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>Meter numbers will only contain uppercase letters (A to Z) and digits (0 to 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and leading and trailing zeros that are part of the meter number must be present.</p> <p>This segment is only used in conjunction with a meter exchange in order to provide the meter number of the meter being removed. Meter exchanges must be one for one. If the exchange is a two for one, there should be a meter exchange loop and a meter removal loop.</p> <p>Change Valid: From Metering Party to Non-Metering Party</p> <p>Meter Addition Transactions (NM1~MA): Not Used Meter Removal Transactions (NM1~MR): Meter Exchange Transactions (NM1~MX): Required Response: Not Used REF~46~9938526S</p>

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

<b>Segment:</b>	<b>REF</b> <b>Reference Identification (Meter Multiplier)</b>
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>There will be one REF~4P segment for each Meter Type, creating the potential for more than one REF~4P segment per NM1 Loop.</p> <p>For instance, if the meter has multiple meter types, and therefore the REF~MT segment is REF~MT~COMBO, there will be multiple REF~4P segments, one to indicate the meter multiplier for each type. For example,</p> <pre> NM1~MQ~3~~~~~32~1234568MG REF~MT~COMBO REF~4P~1200~K1015~TU^41 REF~4P~1~KH015 </pre> <p>Change Valid: From Metering Party to Non-Metering Party</p> <p>Meter Multiplier Change: Required  Meter Addition Transactions (NM1~MA): Required  Meter Removal Transactions (NM1~MR): Not Used  Meter Exchange Transactions (NM1~MX): Required  Meter Attributes Change (NM1~MQ): Required if there is a change to all meter attributes (Meter Multiplier, Number of Dials, Meter Type, and/or Time of Use). If only the Meter Multiplier changes, send only this segment.</p> <p>All Other Change Request Transactions: Not Used  Response: Not Used  REF~4P~10~KHMON~TU^41  REF~4P~1~K1MON~TU^42</p>

Data Element Summary				
	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			4P Affiliation Number	
			Meter Multiplier	
			(Ending Reading - Beginning Reading) * Meter Multiplier = Billed Usage	
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Meter Multiplier	
M	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Meter Type (see REF~MT for valid codes). "COMBO" is not a valid code for this element.	

<b>M</b>	<b>REF04</b>	<b>C040</b>	<b>Reference Identifier</b>	<b>O</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 & C04002.	
<b>M</b>	<b>C04001</b>	<b>128</b>	<b>Reference Identification Qualifier</b>	<b>M ID 2/3</b>
			Code qualifying the Reference Identification	
			TU Trial Location Code	
			Time of Use	
<b>M</b>	<b>C04002</b>	<b>127</b>	<b>Reference Identification</b>	<b>M AN 1/30</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.	
			41 Off Peak	
			42 On Peak	
			43 Intermediate Peak	
			51 Totalizer	

<b>Segment:</b>	<b>REF</b> Reference Identification (Number of Dials)
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	<p>There will be one REF~IX segment for each applicable Meter Type, creating the potential for more than one REF~IX segment per NM1 Loop.</p> <p>For instance, if the meter has multiple types, and therefore the REF~MT segment is REF~MT~COMBO, there may be multiple REF~IX segments, one to indicate the number of dials for each type that has dials. For example,</p> <pre>NM1~MQ~3~~~~~32~1234568MG REF~MT~COMBO REF~IX~6.0~KHMON</pre> <p>Change Valid: From Metering Party to Non-Metering Party</p> <p>Meter Dials Change: Required  Meter Addition Transactions (NM1~MA): Required  Meter Removal Transactions (NM1~MR): Not Used  Meter Exchange Transactions (NM1~MX): Required  Meter Attributes Change (NM1~MQ): Required if there is a change to all meter attributes (Meter Multiplier, Number of Dials, Meter Type, and/or Time of Use). If only the Number of Dials changes, send only this segment.</p> <p>All Other Change Request Transactions: Not Used  Response: Not Used  REF~IX~6.0~KHMON~TU^41</p>

Data Element Summary				
	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			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	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Number of Dials	
M	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Meter Type (see REF~MT for valid codes). "COMBO" is not a valid code for this element.	
M	REF04	C040	Reference Identifier	O
			To identify one or more reference numbers or identification numbers as	

M	C04001	128	specified by the Reference Qualifier	
			Note that this is a composite data element. Populate C04001 and C04002.	
			<b>Reference Identification Qualifier</b>	
			Code qualifying the Reference Identification	
			TU	Trial Location Code
				Time of Use
M	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.	
			41	Off Peak
			42	On Peak
			43	Intermediate
			51	Totalizer

<b>Segment:</b>	<b>REF</b> Reference Identification (LF=Loss Factor)
<b>Position:</b>	130
<b>Loop:</b>	NM1
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>Used only if changing the loss factor.</p> <p>Change Valid: From EDU to CRES only.</p> <p>Change of loss factor:  Request : Required if it is being changed by AEP Ohio &amp; FirstEnergy companies;  optional for DP&amp;L and Duke Energy Ohio  Response: Not Used  REF~LF~2</p>

#### Data Element Summary

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>X12 Attributes</b>
Must Use	<b>REF01</b>	<b>128</b>	<b>Reference Identification Qualifier</b>	<b>M ID 2/3</b>
			Code qualifying the Reference Identification	
			LF Load Planning Number	
			Loss Factor	
Must Use	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b>	<b>X AN 1/30</b>
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	



**Segment:** **REF** Reference Identification (Load Profile)  
**Position:** 130  
**Loop:** NM1 Optional  
**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:** Used only if changing the customer's load profile.

Change Valid: From EDU to CRES only

Change of customer load profile:  
 Request : Required if it is being changed  
 Response: Not Used  
 REF~LO~GS

#### Data Element Summary

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

<b>Segment:</b>	<b>REF</b> <b>Reference Identification (Meter Type)</b>
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	1 REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	<p>There will only be one REF~MT segment for each NM1 loop.</p> <p>If there are multiple meter types on this meter, only one REF~MT will be sent. It will contain the code COMBO. The specific meter types will be identified in REF03 for the attributes.</p> <p>Change Valid: From Metering Party to Non-Metering Party</p> <p>Meter Type Change: Required  Meter Addition Transactions (NM1~MA): Required  Meter Removal Transactions (NM1~MR): Not Used  Meter Exchange Transactions (NM1~MX): Required  Meter Attributes Change (NM1~MQ): Required if there is a change to all meter attributes (Meter Multiplier, Number of Dials, Meter Type, and/or Time of Use). If only the Meter Type changes, send only this segment.</p> <p>All Other Change Request Transactions: Not Used  Response: Not Used  REF~MT~KHMON  REF~MT~COMBO</p>

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>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 for billing purposes. "COMBO" is used for a meter that records more than one measurement. Valid values can be a combination of the following values:  Type of Consumption EA Each K1 Kilowatt Demand (kW) K2 Kilovolt Amperes Reactive Demand (kVAR) K3 Kilovolt Amperes Reactive Hour (kVARH) K4 Kilovolt Amperes (kVA) K5 Kilovolt Amperes Reactive (kVAR) KH Kilowatt Hour (kWh)	X AN 1/30

T9 Thousand Kilowatt Hours (MW)

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

Other Valid Codes

COMBO This code is used to indicate that the meter has multiple measurements, e.g., one meter that measures both kWh and Demand.

C	REF03	352	Description	X	AN 1/80
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A free-form description to clarify the related data elements and their content

Condition: Required if account has cogeneration

COGEN This is a net meter used for cogeneration

**Segment:** **REF** Reference Identification (EDU Rate Class)  
**Position:** 130  
**Loop:** NM1 Optional  
**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:**

Used only if the EDU changed the account's rate class.

Change valid from EDU to CRES only.

Request: Required if it is being changed  
 Response: Not Used  
 REF~NH~RS1

#### Data Element Summary

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

**Segment:** **REF** Reference Identification (EDU Rate Subclass)  
**Position:** 130  
**Loop:** NM1 Optional  
**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:**

Used only if the EDU changed the account's rate subclass.

Change valid from EDU to CRES only.

Request: Required if it is being changed  
 Response: Not Used  
 REF~PR~123

#### Data Element Summary

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

<b>Segment:</b>	<b>REF</b> Reference Identification (Reason for Change)
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<b>1</b> At least one of REF02 or REF03 is required. <b>2</b> If either C04003 or C04004 is present, then the other is required. <b>3</b> If either C04005 or C04006 is present, then the other is required.
<b>Semantic Notes:</b>	<b>1</b> REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	Request: Required if change is at a meter level Response: Not Used REF~TD~REFNH

Data Element Summary				
	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TD Reason for Change	
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			NM1MA Meter Addition	
			NM1MQ Change Meter Attributes	
			Change of Meter Attributes: Meter Multiplier (REF~4P), Number of Dials (REF~IX), Meter Type (REF~MT) and Consumption Provided on 867 (REF~TU). If all of these changes, use NM1MQ as the change reason code. If 3 or less change, use the appropriate changes codes (REF4P, REFIX, REFMT, and/or REFTU). The EDU may also use NM1MQ and send all of the attributes even if they are not all changing.	
			For a change in any meter attributes, FE will send all attributes.	
			The following will be sent	
			NM1*MQ...	
			REF*TD*NM1MQ	
			REF*MT	
			REF*4P for each meter type and time of use indicator	
			REF*IX for each meter type and time of use indicator	
			REF*TU for each meter type and time of use indicator	
			NM1MR	Meter Removal
			NM1MX	Meter Exchange
			REF4P	Change Meter Multiplier
			Do not use REF4P if all of the meter attributes (REF4P, REFIX, REFMT, REFTU) change. If all 4 of these are changing, use the NM1MQ change reason code.	
			REFIX	Change Number of Dials
			Do not use REFIX if all of the meter attributes (REF4P, REFIX, REFMT, REFTU) change. If all 4 of these are changing, use the NM1MQ change reason code.	
			REFLF	Change Loss Factor

REFLO	Change Load Planning Profile
REFMT	Change Meter Type
	Do not use REFMT if all of the meter attributes (REF4P, REFIX, REFMT, REFTU) change. If all 4 of these are changing, use the NM1MQ change reason code.
REFNH	Change Utility Rate Class
REFPR	Change Utility Rate Subclass
REFRB	Change CRES Rate Code
REFSV	Change Service Voltage
REFTU	Change Time of Use
	Do not use REFTU if all of the meter attributes (REF4P, REFIX, REFMT, REFTU) change. If all 4 of these are changing, use the NM1MQ change reason code.
REFTZ	Change Meter Cycle

**Segment:** **REF** **Reference Identification (CRES Rate Code)**

**Position:** 130

**Loop:** NM1 Optional

**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:**

Used only if changing the rate amount code.

Change Valid: From CRES to EDU only. (Not used by AEP)

Change of rate amount:

Request : Required if it is being changed

Response: Not Used

REF~RB~AB43

REF~RB~AB43~10000

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification RB Rate code number CRES Rate Code for the customer.	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 Rate Code	X AN 1/30
C	REF03	352	<b>Description</b> A free-form description to clarify the related data elements and their content Budget Bill Rate Amount for this service (DP&L Only)  Condition: Required if customer is to be on budget billing with the CRES  NOTE: This field will be limited in OH to 10 characters. Since the field will contain a monetary amount, the field will be left justified with an implied decimal. For example: \$123.45 will be provided as 12345 \$100.00 will be provided as 10000	X AN 1/80



<b>Segment:</b>	<b>REF</b> Reference Identification (SV=Service Voltage)
<b>Position:</b>	130
<b>Loop:</b>	NM1
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<b>1</b> At least one of REF02 or REF03 is required. <b>2</b> If either C04003 or C04004 is present, then the other is required. <b>3</b> If either C04005 or C04006 is present, then the other is required.
<b>Semantic Notes:</b>	<b>1</b> REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>	
<b>Notes:</b>	Used only if changing the service voltage.  Change Valid: From EDU to CRES only.  Change of service voltage: Request : Required if it is being changed by AEP Ohio & FirstEnergy companies; optional for DP&L and Duke Energy Ohio Response: Not Used REF~SV~SECONDARY

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			SV Service Charge Number	
			Service Voltage	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			PRIMARY	
			SECONDARY	
			Actual service voltage transmission value (Ex: 34.5kV)	

<b>Segment:</b>	<b>REF</b> Reference Identification (Time of Use)
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>There will be one REF~TU segment for each Time Of Use reading (for each meter type for each meter) that will be provided on the 867.</p> <p>Change Valid:</p> <p>From Metering Party to Non-Metering Party</p> <p>Meter Time of Use Change: Required</p> <p>Meter Addition Transactions (NM1~MA): Required</p> <p>Meter Removal Transactions (NM1~MR): Not Used</p> <p>Meter Exchange Transactions (NM1~MX): Required</p> <p>Meter Attributes Change (NM1~MQ): Required if there is a change to all meter attributes (Meter Multiplier, Number of Dials, Meter Type, and/or Time of Use). If only the Time of Use changes, send only this segment.</p> <p>All Other Change Request Transactions: Not Used</p> <p>Response: Not Used</p> <p>REF~TU~51~KHMON</p> <p>REF~TU~42~K1015</p>

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TU	Trial Location Code
				Time of Use: Type of metering information that will be sent on the 867 transaction.
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			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.	
			41	Off Peak
			42	On Peak
			43	Intermediate
			51	Totalizer
M	REF03	352	Description	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Meter Type (see REF~MT for valid codes). "COMBO" is not a valid code for this element.	

<b>Segment:</b>	<b>REF</b> Reference Identification (Meter Reading Cycle)
<b>Position:</b>	130
<b>Loop:</b>	NM1 Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>Can only be changed by Meter Reading party. If non-meter reading party requests a change of the cycle, they must use LIN05 = PR.</p> <p>Change Valid: From Metering Party to Non-Metering Party or from Non-Metering Party to Metering Party</p> <p>Change of Meter Reading Cycle: Metering Party to Non-Metering Party Request: Required Non-Metering Party to Metering Party Request: Required Response: Not Used REF~TZ~15</p>

Data Element Summary				
	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TZ Total Cycle Number	
			Cycle number when the meter will be read.	
M	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Metered: Meter Reading Cycle	
			Unmetered: Billing Cycle	

**Segment:** **SE** Transaction Set Trailer  
**Position:** 150  
**Loop:**  
**Level:** Detail  
**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:** Request: Required  
Response: Required

SE~28~000000001

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>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	

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Summary: Application EDI Implementation Guideline for Ohio - 814  
Change Request and Response electronically filed by Mr. Joseph D Lindsay on behalf of Ohio  
EDI Working Group