# Ohio Electric

# Implementation Guideline

**For**

# <span style="color:red">E</span>lectronic <span style="color:red">D</span>ata <span style="color:red">I</span>nterchange

**TRANSACTION SET**

# 814

## Change
**Request and Response**
Ver/Rel 004010

# Summary of Changes

| | |
|---|---|
| Version 1.0.0<br>May 1, 2001 | Initial Release |
| Version 1.5.0<br>May 1, 2001 | • Update the description on the 814Change for AMT*RJ segment per Change Control 3.<br>• Add code for budget billing per Change Control 5.<br>• Clarify usage of the AMT*RJ segment per Change Control 6.<br>• 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.<br>• 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.<br>• Add/Correct Change codes at the header/account level on the 814C per Change Control 9.<br>• Added the REF~PC which had been omitted in error per Change Control 14.<br>• Add REFPC as a valid Change Code in REF*TD segment per Change Control 19.<br>• 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.<br>• Add rejection code "ABN" (Duplicate Request) per Change Control 23. |
| Version 2.0.0<br>December 31, 2001 | • Add code for Government Aggregation per Change Control 26.<br>• Fix gray boxes in N1, N3, N4, PER segments for N1~2C and N1~PK per Change Control 29.<br>• 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<br>• Add note to N1 segment for Scheduling Coordinator is used for First Energy Only for Market Support Generation per Change Control 35.<br>• 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. |
| Version 2.1.0<br>June 30, 2002 | • Correct Gray Box in the 814C for the N1, N3, N4, PER segments for Customer Billing Name and address per Change Control 44.<br>• Need to add code to notify supplier that MSG has expired for customer or no longer valid.<br>• Added note to N1~8R segment to show AP validates on first 4 characters of customer name per change control 48.<br>• Added text to title on N1, N3, N4, PER pages to show which N1 per change control 50<br>• Updated REF~Q5 gray boxes to show SDID per change control 51 |

| | |
|---|---|
| Version 2.2.0<br>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<br>• 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.<br>• 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.<br>• Added AMT Segment to the 814 change transaction: Monetary Amount (Budget Amount) per change control 57.<br>• Removed value ESP from REF*PC per change control 59.<br>• 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.<br>• 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.<br>• 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<br>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<br>February 14, 2012 | • Added AEP as user of REF02 and REF03 in REP*PG segment as per EDI Change Control 68<br>• Added AMT*KC and AMT*KZ segments and updated terms for each as per EDI Change Control 69.<br>• Incorporated AEP's administrative changes as per EDI Change Control 70.<br>• Incorporated DP&L's administrative changes as per EDI Change Control 71.<br>• Incorporated Duke Energy Ohio's administrative changes as per EDI Change Control 72.<br>• Removed SR references as per EDI Change Control 76<br>• Added DP&L as user of REF02 and REF03 in REP*PG segment as per EDI Change Control 77.<br>• Incorporated First Energy's administrative changes as per EDI Change Control 81.<br>• Correct Duke Energy Ohio's requirements for bill option change as per EDI Change Control 86 Update. |
| Version 2.5.0<br>February 15, 2013 | • Implemented Duke Energy Ohio support of government aggregation in the REF*PG as per EDI Change Control 90.<br>• 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.<br>• 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<br>March 24, 2014 | • Incorporate Change Control 103 Update (Add net meter indicator)<br>• Incorporate Change Control 105 & 114 (REFLF & REFSV required for AEP & FE)<br>• Incorporate Change Control 106 (clarify use of REFTD for REFBLT & REFPC changes) |
| Version 2.6.1<br>February 13, 2015 | • Correct missing 'A' (data add flag) in REFTD as originally approved in Change Control 103_Update. |

| Version 2.6.2<br>February 11, 2016 | • Incorporated Change Control 127 (AEP OH Net Meter Reporting)<br>• Incorporated Change Control 129 (Add new reason codes to REF7G)<br>• Incorporated Change Control 130 (REF46 Not Used in NM1MR) |
| --- | --- |
| Version 2.6.3<br>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.)<br>• 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))<br>• Incorporate Change Control 149 (Add new reject codes to the 814C to support AEP's TOU Market Transition) |
| Version 2.6.4<br>February 28, 2019 | • Incorporate Change Control 152 (Update the 814C REF*TD gray box in the LIN loop to remove the extra REF~TD~REFBLT under the Duke example)<br>• Incorporate Change Control 157 (Changes to add Dayton Power & Light (DPL) use of the REF*KY and REF*PID on the 814E and 814C and add new program type of "CRES Net Metering" to the REF02 of the REF*PID on the 814E and 814C.)<br>• Incorporate Change Control 159 (Add three new reject codes (FRH, FRI, FRJ) to the 814E and 814C specific to SCB) |

# 814 General Request, Response or Confirmation

<div align="right">

**Functional Group ID=GE**

</div>

## 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.

| | **Segment:** | **ST** **Transaction Set Header** |
|---|---|---|
| | **Position:** | 010 |
| | **Loop:** | |
| | **Level:** | Heading |
| | **Usage:** | Mandatory |
| | **Max Use:** | 1 |
| | **Purpose:** | To indicate the start of a transaction set and to assign a control number |
| | **Syntax Notes:** | |
| | **Semantic Notes:** | 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set). |
| | **Comments:** | |
| | **Notes:** | Request: Required<br>Response: Required<br>ST~814~000000001 |

**Data Element Summary**

| | Ref.<br>Des. | Data<br>Element | Name | Attributes | |
|---|---|---|---|---|---|
| M | ST01 | 143 | **Transaction Set Identifier Code** | M | ID 3/3 |
| | | | Code uniquely identifying a Transaction Set | | |
| | | | 814          General Request, Response or Confirmation | | |
| M | ST02 | 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 | | |

| | | | | **BGN** Beginning Segment | | |
|---|---|---|---|---|---|---|

**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**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| M | BGN01 | 353 | **Transaction Set Purpose Code** | M | ID 2/2 |

Code identifying purpose of transaction set

| | | |
|---|---|---|
| | 11 | Response |
| | 13 | Request |

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| M | BGN02 | 127 | **Reference Identification** | M | AN 1/30 |

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.

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| M | BGN03 | 373 | **Date** | M | DT 8/8 |

Date expressed as CCYYMMDD

The transaction creation date - the date that the data was processed by the sender's application system.

| | | | | Segment: | **N1** Name (8S - EDU) |
|---|---|---|---|---|---|

**Segment:**    **N1** Name (8S - EDU)
**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
Response:   Required
N1~8S~EDU COMPANY~1~007909411~~40

## 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 | | | |
| | | | 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 | | |

**Segment:** **N1** **Name (SJ - CRES)**

| | |
|---|---|
| **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 |
| | Response: Required |
| | N1~SJ~CRES COMPANY~9~007909411CRES~~40 |

### 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 | | |
| | | | 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 | | |

| | Segment: | **N1** Name (RS - Scheduling Coordinator) |
|---|---|---|
| | **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:** | 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. 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 | | |
| | | | 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 | | |

| | | | Segment: | **N1** Name (8R - Customer) | |
|---|---|---|---|---|---|

**Segment:** **N1** Name (8R - Customer)
**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
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**

| | 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 | | |
| | | | 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

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | 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 | | |
| | | | US       United States | | |
| C | N405 | 309 | Location Qualifier | X | ID 1/2 |
| | | | 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 | | |
| C | N406 | 310 | Location Identifier | O | AN 1/30 |
| | | | Code which identifies a specific location | | |
| | | | Condition:  Will be sent if it is in the EDU's system and is required for tax purposes. | | |

**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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | PER02 | 93 | **Name** | **O** | **AN 1/60** |

Free-form name

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | PER03 | 365 | **Communication Number Qualifier** | **X** | **ID 2/2** |

Code identifying the type of communication number

EM                Electronic Mail
FX                Facsimile
TE                Telephone

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | PER04 | 364 | **Communication Number** | **X** | **AN 1/80** |

Complete communications number including country or area code when applicable

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| C | PER06 | 364 | **Communication Number** | **X** | **AN 1/80** |

Complete communications number including country or area code when applicable

Condition:  Required if available

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| C | PER08 | 364 | **Communication Number** | **X** | **AN 1/80** |

Complete communications number including country or area code when
applicable
Condition:  Required if available

| | | | | |
|---|---|---|---|---|
| **Segment:** | | **N1** Name (2C - Party to Receive Copy of Bill) | | |

**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 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

| | 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 | | |
| | | | 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

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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. | | |

**Segment:** **N4** Geographic Location (2C - Party to Receive Copy of Bill)
**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 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**

|   | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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 http://treetops.commerce.net/research/stats/countrycodes.html. | | |
| | | |    US            United States | | |

**Segment:** # PER **Administrative Communications Contact (2C - Party to Receive copy of Bill)**

| | |
|---|---|
| **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 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

| | 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

**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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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 http://treetops.commerce.net/research/stats/countrycodes.html. | | |
| | | | 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**

| | 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** |
| | | | Condition:  Required if available | | |
| | | | Code identifying the type of communication number | | |
| | | | 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

**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**

| | 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

PK      Party to Receive Copy

Third party that is to receive a copy of all notices (not bills) to the end use customer.

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| M | N102 | 93 | Name | X | AN 1/60 |

Free-form name

Name of third party that is to receive copy of all notices.

**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

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

**Segment:** N4 Geographic Location (PK - Party to Receive Notices)

| | |
|---|---|
| **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 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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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 | | |
| | | | Condition: Required if applicable. | | |
| 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 http://treetops.commerce.net/research/stats/countrycodes.html. | | |
| | | | US          United States | | |

**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**

| | 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

| **Segment:** | **LIN** Item Identification |
| --- | --- |
| **Position:** | 010 |
| **Loop:** | LIN    Optional |
| **Level:** | Detail |
| **Usage:** | Optional |
| **Max Use:** | 1 |
| **Purpose:** | To specify basic item identification data |

| **Syntax Notes:** | 1 | If either LIN04 or LIN05 is present, then the other is required. |
| --- | --- | --- |
| | 2 | If either LIN06 or LIN07 is present, then the other is required. |
| | 3 | If either LIN08 or LIN09 is present, then the other is required. |
| | 4 | If either LIN10 or LIN11 is present, then the other is required. |
| | 5 | If either LIN12 or LIN13 is present, then the other is required. |
| | 6 | If either LIN14 or LIN15 is present, then the other is required. |
| | 7 | If either LIN16 or LIN17 is present, then the other is required. |
| | 8 | If either LIN18 or LIN19 is present, then the other is required. |
| | 9 | If either LIN20 or LIN21 is present, then the other is required. |
| | 10 | If either LIN22 or LIN23 is present, then the other is required. |
| | 11 | If either LIN24 or LIN25 is present, then the other is required. |
| | 12 | If either LIN26 or LIN27 is present, then the other is required. |
| | 13 | If either LIN28 or LIN29 is present, then the other is required. |
| | 14 | If either LIN30 or LIN31 is present, then the other is required. |

| **Semantic Notes:** | 1 | LIN01 is the line item identification |
| --- | --- | --- |
| **Comments:** | 1 | See the Data Dictionary for a complete list of IDs. |
| | 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. |

**Notes:** Response/LIN:  There must be a response for each LIN request.

Multiple Changes: Within one account/service delivery point (AEP only).   DP&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.

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.

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)

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)

Request:   Required
Response: Required
LIN~CECE1999123108590001~SH~EL~SH~CE

**Data Element Summary**

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | LIN01 | 350 | **Assigned Identification** | O | AN 1/20 |

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.

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | LIN02 | 235 | **Product/Service ID Qualifier** | M | ID 2/2 |

Code identifying the type/source of the descriptive number used in Product/Service ID (234)

    SH          Service Requested

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | LIN03 | 234 | **Product/Service ID** | M | AN 1/48 |

Identifying number for a product or service

    EL          Electric Service

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | LIN04 | 235 | **Product/Service ID Qualifier** | X | ID 2/2 |

Code identifying the type/source of the descriptive number used in Product/Service ID (234)

    SH          Service Requested

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | LIN05 | 234 | **Product/Service ID** | X | AN 1/48 |

Identifying number for a product or service

    CE          Energy Services

Indicates this transaction relates to 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.)

**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**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | | |

| | | | Segment: | **REF** Reference Identification (Q5 = SDID Number) |
|---|---|---|---|---|

**Segment:** **REF** Reference Identification (Q5 = SDID Number)

| | |
|---|---|
| **Position:** | 030 |
| **Loop:** | LIN    Optional |
| **Level:** | Detail |
| **Usage:** | Optional |
| **Max Use:** | 12 |
| **Purpose:** | To specify identifying information |
| **Syntax Notes:** | 1   At least one of REF02 or REF03 is required. |
| | 2   If either C04003 or C04004 is present, then the other is required. |
| | 3   If either C04005 or C04006 is present, then the other is required. |
| **Semantic Notes:** | 1   REF04 contains data relating to the value cited in REF02. |
| **Comments:** | |
| **Notes:** | SDID numbers will only contain uppercase letters (A to Z) and Digits (0 - 9).  Note that punctuation (spaces, dashes, etc.) must be excluded, and leading and trailing zeros that are part of the SDID number must be present. |
| | Required if customer is in AEP service territory.  Max use of one per transaction |
| | REF~Q5~987654 |

**Data Element Summary**

| | Ref.<br>Des. | Data<br>Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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 | | |

**Segment:** # REF Reference Identification (CRES Account Number)

| | |
|---|---|
| **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:** | 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. |

Change Valid:
  From CRES to Utility

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

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | | |

| | | | | | |
|---|---|---|---|---|---|
| **Segment:** | | **REF** Reference Identification (EDU Account Number) | | | |

**Segment:** **REF** Reference Identification (EDU Account Number)

| | |
|---|---|
| **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:** | 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. |

When changing the Utility's account number, the previous account number must appear in the REF~45 segment.
Change Valid: From Utility to CRES

Request: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number.

Accept Response: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number. First Energy will send Customer Number

Reject Response: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number. First Energy will send Customer Number

REF~12~2931839200

### Data Element Summary

| | Ref.<br>Des. | Data<br>Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | | |

**Segment:** # REF Reference Identification (Summary Interval Indicator)

| | |
|---|---|
| **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 to change type of information being received for interval accounts. (Duke Energy Ohio requires this to be sent under LIN = CE)

Change Valid:
  From Non-Metering Party to Metering Party

Change of Summary Interval Indicator:
  Request:   Required
  Response: Not Used
All other Change Transactions:  Not Used
REF~17~SUMMARY

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| **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.

| | | | | | |
|---|---|---|---|---|---|
| **Segment:** | | **REF** | Reference Identification (Status Reason) | | |

**Segment:** **REF** Reference Identification (Status 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~~ Optional (used for BNK code only to indicate a drop due to Bankruptcy (EDU to CRES only) |
| | Accept Response:   Required when status information must be conveyed. |
| | Reject Response:   Not Used |
| | REF~1P~A13~CHANGE NOT SUPPORTED |

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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.

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 |
| BNK | Bankruptcy |

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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.

**Segment:** # REF Reference Identification (Previous EDU Account Number)

| | |
|---|---|
| **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:** | 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. |
| | Used only if the EDU changed the account number. |
| | |
| | Change valid from EDU to CRES. |
| | |
| | Request:     Required if the Account Number is being changed.  Not used by AEP. |
| | Response:  Not Used |
| | REF~45~1105687500 |

**Data Element Summary**

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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.

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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
Type of account cannot be enrolled in TOU program

ATI — Account Type Invalid

Valid for LIN05 = CE
Type of account cannot be enrolled in TOU program

C02 — Customer is on Credit Hold

Valid for LIN05 = CE
Customer arrears exceeds limits outlined in purchase of receivables contract between the EDU and CRES .

C11 — 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

FRH — Bill Option Not Valid – Net Metered Account (AEP Only)

Valid for LIN05 = CE

FRJ — Bill Option Not Valid – Payment Agreement (AEP Only)

Valid for LIN05 = CE

FRH — Bill Option Not Valid – Account in Arrears (AEP Only)

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

| | | | | | |
|---|---|---|---|---|---|
| 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.   a text

explanation in this element.

**Segment:** **REF** Reference Identification (Billing Type)

|  |  |
|---|---|
| **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 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**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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.

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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.

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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, DP&L & 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 | |

**Segment:** # REF Reference Identification (Party Calculating Charges)

| | |
|---|---|
| **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 Party Calculating Charges |

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~PC~LDC

### Data Element Summary

| | Ref. Des. | Data Element | Name | Attributes | | |
|---|---|---|---|---|---|---|
| M | REF01 | 128 | **Reference Identification Qualifier** | M | ID 2/3 | |

Code qualifying the Reference Identification

| | | |
|---|---|---|
| PC | Production Code | |
| | Party Calculating Charges. | |

| | Ref. Des. | Data Element | Name | Attributes | | |
|---|---|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | | Attributes | |
|---|---|---|---|---|---|---|
| M | REF01 | 128 | **Reference Identification Qualifier** | | M | ID 2/3 |
| | | | Code qualifying the Reference Identification | | | |
| | | | PID | Program Identification Number | | |
| | | | | Program Identifier | | |
| 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 | | | |
| | | | 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 | | |
| | | | CNM | CRES Net Metering (DP&L Only) | | |
| | | | | Used to identify customers on a net meter contract with CRES | | |
| | | | NCNM | Not CRES Net Metering (DP&L Only) | | |
| | | | | Used to remove customers on a net meter contract with CRES | | |

| | | | Segment: | **REF** Reference Identification (Government Aggregation) |
| | | | Position: | 030 |
| | | | Loop: | LIN      Optional |
| | | | Level: | Detail |
| | | | Usage: | Optional |
| | | | Max Use: | >1 |
| | | | Purpose: | To specify identifying information |

**Segment:** **REF** Reference Identification (Government Aggregation)
**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 Aggregation. DP&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.

Change Valid:
From EDU to CRES: Not Used
From CRES to EDU: Anytime

Change of Aggregation:
Request:   Required if it is being changed
Response: Not Used
REF~PG~GAG

**Data Element Summary**

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | REF01 | 128 | **Reference Identification Qualifier** | | M   ID 2/3 |
| | | | Code qualifying the Reference Identification | | |
| | | | PG | Product Group | |
| | | | | Aggregation | |
| 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 | | |
| | | | 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) | |
| C | REF03 | 352 | **Description** | | X   AN 1/80 |
| | | | 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.

|  |  |
|---|---|
| **Segment:** | **REF** Reference Identification (Reason for Change) |
| **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: Required if change is at an account (LIN) or header level |

Response: Not Used

For AEP, DP&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):

Example of Rate Ready to Bill Ready:
REF~BLT~LDC
REF~PC~ DUAL
REF~TD~REFBLT
REF~TD~REFPC
NM1`MQ~3~~~~~~32~ALL

Example of Bill Ready to Rate Ready:
REF~BLT~LDC
REF~PC~LDC
REF~TD~REFBLT
REF~TD~REFPC
NM1`MQ~3~~~~~~32~ALL
REF~TD~REFRB
REF~RB~CRES01

For Duke Energy, OH, only the REF*TD*REFBLT segment will be accepted at the account level when changing the bill type. The REF*TD*REFPC should NOT be sent and the transaction will be rejected if sent. A REF~TD~REFBLT segment should be sent along with the REF~BLT and REF~PC segments at the account level (and REF~TD~REFRB and REF~RB segment in the NM1 loop if changing to rate ready):
Example of Rate Ready to Bill Ready:
REF~PC~LDC
REF~BLT~DUAL
REF~TD~REFBLT
NM1`MQ~3~~~~~~32~ALL

Example of Bill Ready to Rate Ready:
REF~PC~LDC
REF~BLT~LDC
REF~TD~REFBLT
NM1`MQ~3~~~~~~32~ALL
REF~RB~CRES01

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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

| | |
|---|---|
| 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 Reserve 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 |
| REFPID | Change Program Indicator (AEP & DP&L Only) |
| REFQ5 | Change AEP's SDID Number(AEP Only) |

| C | REF03 | 352 | **Description** | **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

| | | | | |
|---|---|---|---|---|
| **Segment:** | | **DTM** Date/Time Reference (Effective Date) | | |

**Position:** 040
**Loop:** LIN Optional
**Level:** Detail
**Usage:** Optional
**Max Use:** >1
**Purpose:** To specify pertinent dates and times
**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.
2 If DTM04 is present, then DTM03 is required.
3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**
**Comments:**
**Notes:** 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**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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 | |

| | | | | |
|---|---|---|---|---|
| **Segment:** | | **DTM** Date/Time Reference (Service Period Start) | | |

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

**Position:**     040
**Loop:**     LIN     Optional
**Level:**     Detail
**Usage:**     Optional
**Max Use:**     >1
**Purpose:**     To specify pertinent dates and times
**Syntax Notes:**     1     At least one of DTM02 DTM03 or DTM05 is required.
       2     If DTM04 is present, then DTM03 is required.
       3     If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**
**Comments:**
**Notes:**     Used 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**

| | Ref.<br>Des. | Data<br>Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | | |

| | | | | | |
|---|---|---|---|---|---|
| **Segment:** | | **DTM** Date/Time Reference (Service Period End Date) | | | |

**Position:** 040
**Loop:** LIN      Optional
**Level:** Detail
**Usage:** Optional
**Max Use:** >1
**Purpose:** To specify pertinent dates and times
**Syntax Notes:**   1   At least one of DTM02 DTM03 or DTM05 is required.
　　　　　　　　　2   If DTM04 is present, then DTM03 is required.
　　　　　　　　　3   If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**
**Comments:**
**Notes:** Used only if changing the end date of power flow.

Change Valid:
From EDU to CRES only.

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.

Response: Not Used
DTM~151~19990215

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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<br>AMT~B5~100.00 | | |

### Data Element Summary

| | Ref.<br>Des. | Data<br>Element | Name | Attributes |
|---|---|---|---|---|
| **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**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | | |

**Segment:** **AMT** Monetary Amount (KC=Peak Load Contribution)

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

| | | |
|---|---|---|
| **Notes:** | 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.

**Example:** 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).

| | Ref. Des. | Data Element | Name | X12 Attributes |
|---|---|---|---|---|
| Must Use | AMT02 | 782 | Monetary Amount | M R 1/18 |

       Monetary amount
       Peak Load Contribution

**Segment:** $\mathbf{AMT}$ **Monetary Amount (KZ=Network Service Peak Load)**

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

| | | |
|---|---|---|
| **Notes:** | 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.

**Example:** AMT*KZ*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 | |
| | | | 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 | |

**Segment:** **NM1** Individual or Organizational Name (Meter Level Information)

| | |
|---|---|
| **Position:** | 080 |
| **Loop:** | NM1 Optional |
| **Level:** | Detail |
| **Usage:** | Optional |
| **Max Use:** | 1 |
| **Purpose:** | To supply the full name of an individual or organizational entity |
| **Syntax Notes:** | **1** If either NM108 or NM109 is present, then the other is required. |
| | **2** If NM111 is present, then NM110 is required. |
| **Semantic Notes:** | **1** NM102 qualifies NM103. |
| **Comments:** | **1** NM110 and NM111 further define the type of entity in NM101. |
| **Notes:** | 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. Des. | Data 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. | |

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | NM102 | 1065 | **Entity Type Qualifier** | | **M ID 1/1** |

Code qualifying the type of entity

| | |
|---|---|
| 3 | Unknown |

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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"). |

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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.

| | | | |
|---|---|---|---|
| **Segment:** | | **REF** Reference Identification (Previous Meter Number) | |
| **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:** | | 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. | |

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.

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.

Change Valid:
  From Metering Party to Non-Metering Party

  Meter Addition Transactions (NM1~MA): Not Used
  Meter Removal Transactions (NM1~MR):
  Meter Exchange Transactions (NM1~MX): Required
  Response: Not Used
REF~46~9938526S

### Data Element Summary

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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 | | |

| | | | | |
|---|---|---|---|---|
| **Segment:** | | **REF** Reference Identification (Meter Multiplier) | | |
| **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:**
There will be one REF~4P segment for each Meter Type, creating the potential for more than one REF~4P segment per NM1 Loop.

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,

   NM1~MQ~3~~~~~~32~1234568MG
   REF~MT~COMBO
   REF~4P~1200~K1015~TU^41
   REF~4P~1~KH015
Change Valid:
   From Metering Party to Non-Metering Party

   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.

All Other Change Request Transactions: Not Used
Response: Not Used
REF~4P~10~KHMON~TU^41
REF~4P~1~K1MON~TU^42

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| **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. | | |

| M | REF04 | C040 | **Reference Identifier** | | **O** |
|---|---|---|---|---|---|

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.

| M | C04001 | 128 | **Reference Identification Qualifier** | **M** | **ID 2/3** |
|---|---|---|---|---|---|

Code qualifying the Reference Identification

TU          Trial Location Code

Time of Use

| M | C04002 | 127 | **Reference Identification** | **M** | **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 Peak

51          Totalizer

| | | | | |
|---|---|---|---|---|
| **Segment:** | | **REF** | Reference Identification (Number of Dials) | |

**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:**
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.

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,

    NM1~MQ~3~~~~~~32~1234568MG
    REF~MT~COMBO
    REF~IX~6.0~KHMON
Change Valid:
    From Metering Party to Non-Metering Party

    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.

All Other Change Request Transactions: Not Used
Response: Not Used
REF~IX~6.0~KHMON~TU^41

**Data Element Summary**

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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 | | |

specified by the Reference Qualifier

Note that this is a composite data element.  Populate C04001 and C04002.

| | | | | | |
|---|---|---|---|---|---|
| **M** | **C04001** | **128** | **Reference Identification Qualifier** | **M** | **ID 2/3** |

Code qualifying the Reference Identification

| | |
|---|---|
| TU | Trial Location Code |

Time of Use

| | | | | | |
|---|---|---|---|---|---|
| **M** | **C04002** | **127** | **Reference Identification** | **M** | **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 |

| | |
|---|---|
| **Segment:** | **REF** Reference Identification (LF=Loss Factor) |
| **Position:** | 130 |
| **Loop:** | NM1 |
| **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 loss factor. |

Change Valid:    From EDU to CRES only.

Change of loss factor:
   Request :  Required if it is being changed by AEP Ohio & FirstEnergy companies;
optional for DP&L and Duke Energy Ohio
   Response: Not Used
REF~LF~2

**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
   LF              Load Planning Number
                    Loss Factor

| | Ref. Des. | Data Element | Name | X12 Attributes | |
|---|---|---|---|---|---|
| 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

**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

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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 | |

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

**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:** There will only be one REF~MT segment for each NM1 loop.

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.
Change Valid:
  From Metering Party to Non-Metering Party

  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.

All Other Change Request Transactions: Not Used
Response: Not Used
REF~MT~KHMON
REF~MT~COMBO

### Data Element Summary

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| M | REF01 | 128 | Reference Identification Qualifier | M | ID 2/3 |

Code qualifying the Reference Identification

MT        Meter Ticket Number

Meter Type

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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
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)

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 |
|---|-------|-----|-------------|---|---|---------|

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**

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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**

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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 | | |

| | | | | |
|---|---|---|---|---|
| | **Segment:** | **REF** Reference Identification (Reason for Change) | | |

**Segment:** **REF** Reference Identification (Reason for Change)
**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:** Request: Required if change is at a meter level
Response: Not Used
REF~TD~REFNH

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes | |
|---|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| M | REF01 | 128 | **Reference Identification Qualifier** | M | ID 2/3 |

Code qualifying the Reference Identification

| | RB | | Rate code number |
|---|---|---|---|

CRES Rate Code for the customer.

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| 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
Rate Code

| | Ref. Des. | Data Element | Name | | Attributes |
|---|---|---|---|---|---|
| C | REF03 | 352 | **Description** | X | AN 1/80 |

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

**Segment:** # REF Reference Identification (SV=Service Voltage)

| | |
|---|---|
| **Position:** | 130 |
| **Loop:** | NM1 |
| **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 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

| | Ref. Des. | Data Element | Name | X12 Attributes | |
|---|---|---|---|---|---|
| **Must Use** | **REF01** | **128** | **Reference Identification Qualifier** | **M** | **ID 2/3** |

Code qualifying the Reference Identification
    SV                 Service Charge Number
                            Service Voltage

| | Ref. Des. | Data Element | Name | X12 Attributes | |
|---|---|---|---|---|---|
| **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)

| | | | | |
|---|---|---|---|---|
| **Segment:** | | **REF** Reference Identification (Time of Use) | | |

**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:**

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.
Change Valid:
  From Metering Party to Non-Metering Party

  Meter Time of Use 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 Time of Use changes, send only this segment.

All Other Change Request Transactions: Not Used
Response: Not Used
REF~TU~51~KHMON
REF~TU~42~K1015

**Data Element Summary**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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.

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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.

**Segment:** **REF** **Reference Identification (Meter Reading Cycle)**

**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:** Can only be changed by Meter Reading party. If non-meter reading party requests a change of the cycle, they must use LIN05 = PR.

Change Valid:
From Metering Party to Non-Metering Party or from Non-Metering Party to Metering Party

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

**Data Element Summary**

| | Ref. Des. | Data Element | Name | | Attributes | |
|---|---|---|---|---|---|---|
| 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**

| | Ref. Des. | Data Element | Name | Attributes |
|---|---|---|---|---|
| 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 | |

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**5/13/2019 10:48:33 AM**

**in**

**Case No(s). 19-0666-EL-EDI**

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