Ohio Electric

Implementation Guideline

For

Electronic Data Interchange

TRANSACTION SET

814

Enrollment
Request and Response
Ver/Rel 004010

	Summary of Changes
Version 1.0.0 May 1, 2001	Initial Release
Version 1.5.0 May 1, 2001	• Add rejection code for minimum stay account "not eligible to shop" per Change Control 4. • Add code for budget billing per Change Control 5. • Clarify usage of the AMT*RJ segment per Change Control 6. • 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.
Version 2.0.0 December 31, 2001	• Add code for Government Aggregation per Change Control 26. • Add new enrollment rejection reason code of C02 to Ref 7G to reject enrollments for end use customer accounts with EDU arrears in excess of Purchase of Receivables contractual limits
Version 2.1.0 June 30, 2002	▪ Added note to N1~8R segment to show AP validates on first 4 characters of customer name per change control 48. ▪ Added gray boxes with conditions in the PER segment per change control 49. ▪ Added text to title on N1, N3, N4, PER pages to show which N1 per change control 50 ▪ Updated REF~Q5 gray boxes to show SDID per change control 51
Version 2.2.0 October 1, 2005	• Removed value ESP from REF*PC per change control 59. • Modified REF02 and add REF03 line in REF*PG loop for FirstEnergy use only to insert coding for adding group aggregation code information per change control 65.
Version 2.3.0 March 9, 2010	• During 3/3/10 meeting, the OSPO Data Working Group reviewed & confirmed EDI change controls up to and including CC67. All changes in the v2.2.0 redline were accepted and v2.3.0 created as the new baseline for Ohio.
Version 2.4.0 February 14, 2012	• Added AEP as user of REF02 and REF03 in REP*PG segment as per EDI Change Control 68 • Added AMT*KC and AMT*KZ segments, update terms for each as per EDI Change Control 69. • Incorporated AEP's administrative changes as per EDI Change Control 70. • Incorporated DP&L's administrative changes as per EDI Change Control 71. • Incorporated Duke Energy Ohio's administrative changes as per EDI Change Control 72. • Corrected gray box of REF*TZ as per EDI Change Control 74 • Removed SR and SW as applicable services in the LIN05. Removed SR and SW from ASI02 = 029 gray box. Removed W09 and W11 as applicable reject reason codes. All changes made as per EDI Change Control 76 ▪ Added DP&L as user of REF02 and REF03 in REP*PG segment as per EDI Change Control 77.
Version 2.5.0 February 15, 2013	• Added AEP as user of REF02 GAG in REF*PG segment as per EDI Change Control 78. • Incorporated FirstEnergy's administrative changes as per EDI Change Control 81. • Added Duke Energy Ohio support of government aggregation in the REF*PG as per EDI Change Control 90. • Added Service Voltage and Loss Factor to the 814E as per EDI Change Control 91. Change Effective 5/25/2012 for FirstEnergy companies only, not used by other EDUs • Added four new codes to REF7G as per EDI Change Control 96. ▪ Added 'UNE' code to REF7G as per EDI Change Control 98.
Version 2.6.0 March 24, 2014	• Incorporated Change Control 103 Update (Add Net Meter Indicator) • Incorporated Change Control 105 & 114 (REFLF & REFSV required by AEP & FirstEnergy) • Incorporate Change Control 109 (removal of A77 code in REF7G)
Version 2.6.1 February 13, 2015	• Incorporated Change Control 118 (REFSPL to optional)
Version 2.6.2 February 11, 2016	• Incorporated Change Control 127 (AEP OH Net Meter Reporting)

Version 2.6.3 February 8, 2018	• Incorporated Change Control 144 (Update the 814E to add a REF*PID segment to be used if enrolling under a TOU billing program) • Incorporated Change Control 148 (Add new reject codes to the 814E to support AEP's TOU Market Transition)
Version 2.6.4 February 28, 2019	• Incorporated Change Control 154 (Update gray boxes under NM1 to allow "ALL" as the only valid value in NM109 on the 814E Request) • Incorporated Change Control 157 (Changes to add Dayton Power & Light (DP&L) 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.) • Incorporated Change Control 159 (Add three new reject codes (FRH, FRI, FRJ) to the 814E and 814C specific to SCB) • Incorporated Change Control 165 (FirstEnergy is no longer sending the REF*45 line in EDI transactions as of December 7th 2018. This is an administrative Change Control only to remove the sentence "FirstEnergy will always send if noted on the account in CIS system." from the gray box area in the above noted transactions.) • Incorporated Change Control 166 (Update the 814 E to remove the bill options listed for being required for the Budget Billing Status. The only option not listed is Supplier Consolidated Billing, which would also have the requirement.)
Version 2.7.0 July 21, 2020	• Incorporated Change Control 171 to clarify the use of the default process if the Summary Interval Request is not sent. • Incorporated Change Control 173 to allow Rejection Reason Code A91 – Invalid Service (Commodity). • Incorporated Change Control 175 to require CRES Net Metering Program (REF*PID) when customer has a CRES net metering contract. Reject Reason Code ATI was also updated to remove the limitation of being used for AEP's TOU program and instead could be used for any program identified in the PID. • Updated ANSI X12 looping structure • Normalized utility names FirstEnergy and DP&L and AEP
Version 2.7.1 April 14, 2021	• Incorporated Change Control 180 to remove segments not used by the utilities, including the N1, N3, N4 and PER for N101 = 2C (Party to Receive Copies of Bills) and PK (Party to Receive Copies of Notices).

814 General Request, Response or Confirmation

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.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
M	010	ST	Transaction Set Header	M	1		
M	020	BGN	Beginning Segment	M	1		
			LOOP ID - N1			>1	
	040	N1	Name	O	1		n1
	060	N3	Address Information	O	2		
	070	N4	Geographic Location	O	1		

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - LIN			>1	
	010	LIN	Item Identification	O	1		
	020	ASI	Action or Status Indicator	O	1		
	030	REF	Reference Identification	O	>1		
	040	DTM	Date/Time Reference	O	>1		
	060	AMT	Monetary Amount	O	>1		
			LOOP ID - NM1			>1	
	080	NM1	Individual or Organizational Name	O	1		n2
	130	REF	Reference Identification	O	>1		
	140	DTM	Date/Time Reference	O	>1		
M	150	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. The N1 loop is used to identify the transaction sender and receiver.
2. 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 Response: Required ST~814~000000001			

Data Element Summary

	Ref. Des.	Data 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	

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 BGN~11~199904020830531~19990401		

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	
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.	
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)
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		
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		
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 (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~92~STORE 73
	N1~8R~CUSTOMER 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		
			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)		
			Condition: Required if 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)			

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:

Request: Optional
CE Accept Response: Required for Customer Service Address
All other Responses: 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)** |

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:
CE Request: Optional
CE Accept Response: Required for Customer Service Address
All other Requests: Not Used
All other Responses: Not Used
N4~ANYTOWN~OH~19999~US~CO~COLUMBIA
N4~ANYTOWN~OH~199990001~US~CO~54871
N4~ANYTOWN~OH~19999~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.		
O	**N404**	**26**	**Country Code**	**O**	**ID 2/3**
			Code identifying the country		
			For country codes not listed, please refer to ISO 3166.		
			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/Parish		
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.		
			Service Address County/Parish		

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:
Request: Not Used
CE Accept Response: Must send for Service Address if maintained in the EDU system.
All Other Responses: Not Used
Used to convey information about the customer at the service address.
PER~IC~CONTACT NAME~TE~6145551212

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
M	PER01	366	**Contact Function Code**	M	ID 2/2

Code identifying the major duty or responsibility of the person or group named

IC   Information Contact

M	PER02	93	**Name**	O	AN 1/60

Free-form name

M	PER03	365	**Communication Number Qualifier**	X	ID 2/2

Code identifying the type of communication number

EM   Electronic Mail
FX   Facsimile
TE   Telephone

M	PER04	364	**Communication Number**	X	AN 1/80

Complete communications number including country or area code when applicable

C	PER05	365	**Communication Number Qualifier**	X	ID 2/2

Code identifying the type of communication number

Condition: Required if available

EM   Electronic Mail
FX   Facsimile
TE   Telephone

C	PER06	364	**Communication Number**	X	AN 1/80

Complete communications number including country or area code when applicable

Condition: Required if available

C	PER07	365	**Communication Number Qualifier**	X	ID 2/2

Code identifying the type of communication number

Condition: Required if available

EM   Electronic Mail
FX   Facsimile
TE   Telephone

C	PER08	364	**Communication Number**	X	AN 1/80

Complete communications number including country or area code when applicable

Condition: Required if available

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: Required for DP&L only; otherwise not used

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

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

Free-form name

Name of scheduling coordinator

	Ref. Des.	Data Element	Name		Attributes
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

	Ref. Des.	Data Element	Name		Attributes
M	N104	67	Identification Code	X	AN 2/80

Code identifying a party or other code

Scheduling Coordinator Duns or Duns + 4 number

Segment:	**N1** Name (BT - Customer Billing Name)			

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: Not Used
                    CE Accept Response: Required if Billing Address is different than Service Address
                    All other Responses: Not Used
                    N1~BT~ACCOUNTS PAYABLE DIVISION

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	N101	98	**Entity Identifier Code**	**M ID 2/3**
			Code identifying an organizational entity, a physical location, property or an individual	
			BT Bill-to-Party	
			Customer Billing Name	
M	N102	93	**Name**	**X AN 1/60**
			Free-form name	
			Name associated with billing address	

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

Notes:
Request: Not Used
CE Accept Response: Required if Billing Address is different than Service Address
All other Responses: 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: Not Used
CE Accept Response: Required if Billing Address is different than Service Address
All other Responses: 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: Not Used
CE Accept Response: Must send for Billing Address if maintained in the EDU system.
All Other Responses: 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**
			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: Processing Order: Only one service may be requested per LIN Loop. The sender must send the primary service request first within any single 814.

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

Rejections:
If the primary service request (Energy Services) is rejected, all secondary services (e.g. historical usage request, etc.) must also be rejected using REF~7G~SSR (Secondary Service Rejected).
FirstEnergy will not use the SSR but instead processes the secondary request even when the primary service request rejects.

PLEASE NOTE: SOME UTILITIES MAY CHARGE FOR MONTHLY INTERVAL DATA. TO AVOID THIS CHARGE THE SI REQUEST FOR SUMMARY DATA MUST BE SENT AS OUTLINED BELOW.
Request: Required
Response: Required
LIN~AECE1999123108590001~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 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.		
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		

| M | LIN03 | 234 | **Product/Service ID** | | M | AN 1/48 |

Identifying number for a product or service

    EL   Electric Service

| 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

| 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.

    HI   Historical Interval Usage

Request to obtain historical interval usage for this customer. The usage data is returned on a Historical Interval Usage transaction (e.g. 867, web, etc.)

If Historical Interval Usage is requested, but the intervals are not available, a Historical Monthly Usage transaction will be sent.

    HU   Historical Monthly Usage

Request to obtain historical monthly usage information for this customer. The usage data is returned on an 867 Historical Monthly Usage transaction.

    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.)

Interval data, when available, must be provided at a summary level and at a detail level.

*   As a default, interval data will be sent at the summary level by AEP, Duke, and DP&L and at the detail level by FirstEnergy.

*   There is no charge for detail monthly data from AEP. Duke, DP&L, and FirstEnergy charge for detail monthly data. See EDU's tariff for specific charge information.

*   If the requestor wants to receive interval data at only the summary level from FirstEnergy, then an SI request must be sent in LIN05.

*   SENDING THE SI with REF*17* SUMMARY REQUEST TO FIRSTENERGY WILL ELIMINATE ANY CHARGES THAT MAY BE INCURRED FOR RECEIVING THE INTERVAL DATA.

*   If the account is not an interval account, the request should be accepted, but a status reason code of NIA must be sent.

	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:		

<table>
<tr><td>Notes:</td><td>Identifies the action to be taken or the status of a requested action for the service identified in the LIN segment.
Request: Required
Accept Response: Required
Reject Response: Required
ASI~7~021   (Request)
ASI~WQ~021   (Accept Response)
ASI~U~021   (Reject Response)</td></tr>
</table>

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		
			021	Addition	
				Used when requesting the following services: CE - Energy Services	
			029	Inquiry	
				Use when requesting the following services: HI - Historical Interval Usage HU - Historical Monthly Usage SI - Summary Information for Interval Account	

| | | | | Segment: | **REF** Reference Identification (CRES Account 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.
Request: Optional
Accept Response: Required unless account number was not provided on the request
Reject Response: Required unless account number was not provided on the request
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.
	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. FirstEnergy will send Customer Number
	Reject Response: Conditional - Required for all utilities except AEP, which will use Service Delivery Identification Number unless account number was not provided on the request. FirstEnergy will send Customer Number
	REF~12~2931839200

Data Element Summary

	Ref. Des.	Data 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 (Type of information)

Segment: **REF** Reference Identification (Type of information)
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: Every utility must provide the ability for a supplier to receive interval data at either the summary level or the detail level. (Duke Energy Ohio requires this to be sent under LIN = CE)

Request: Required for interval meters
Accept Response: Required for interval meters
Reject Response: Not Used

If summary or detail is not specified in the 814E:
AEP: Default is Summary. No charge for detail.
Duke: Default is Summary. There are charges for detail.
DP&L: Default is Summary. There are charges for detail.
FirstEnergy: Default is Detail. There are charges for detail. Must request summary interval (LIN05 = SI & REF*17*SUMMARY) in the 814E to receive summary monthly data.

REF~17~SUMMARY
REF~17~DETAIL

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 indicate how the interval metering usage will be sent (summary or detail)		
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			
			SUMMARY			

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
Accept Response: Required when status information must be conveyed.
Reject Response: Not Used
REF~1P~HUU~HISTORICAL USAGE UNAVAILABLE

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.

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

Valid for LIN05 = CE, HI, HU, 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.

    A84   Invalid Relationship

Valid for LIN05 = SI
This will be used when the requestor is not the supplier of record.

    ABN   Duplicate Request Received

Valid for LIN05 = CE, HI, HU, SI

    B30   Currently Enrolled

Valid for LIN05 = CE
Used to indicate that the customer is already enrolled with the CRES that is requesting enrollment. The transaction is treated as an inquiry.

    HIU   Historical Interval Usage Unavailable

Valid for LIN05 = HI
Historical Monthly Usage data will be provided instead.

    HUU   Historical Monthly Usage Unavailable

Valid for LIN05 = HI, HU
No Historical Usage

    MIP   Meter Install Pending

If this code is used, DTM~150 (Estimated Start Date) will not be populated.

    NIA   Not Interval Account

Valid for LIN05 = SI

    SNP   Service Not Provided

Valid for LIN05 = HI, HU, SI

REF03 may contain further information, such as "Not available via EDI, please call"

| 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)
	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.

Request: Not Used

Response: Required if the EDU Account Number has changed within the last 60 days. Required for all utilities except AEP, which will use Service Delivery Identification Number.

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

           EDU's previous account number for the customer. Only applies to the current service address. This account number change as a result of the utility re-routing

	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

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.	
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, HI, HU, SI	
			021 Move Pending	
			Valid for LIN05 = CE	
			Customer will be moving before the CRES intended start date.	
			A13 Other	
			Valid for LIN05 = CE, HI, HU, 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 Energy Supplier Account Invalid or Not Found	
			Valid for LIN05 = CE, HI, HU, SI	
			A76 Utility Account Invalid or Not Found	
			Valid for LIN05 = CE, HI, HU, 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.	
			A78 Service address does not match account	
			A91 Invalid Service (Commodity)	
			Valid for LIN05 = CE, HI, HU, SI	
			ABN Duplicate Request Received	
			Valid for LIN05 = CE, HI, HU, SI	
			ACI Action Code (ASI01) Invalid	
			Valid for LIN05 = CE, HI, HU, SI	
			ANE Account Not Eligible	
			ANK Invalid Source of Information	

		Valid for LIN05 = CE, HI, HU, SI Receiver of request does not provide requested service and/or does not have requested information.
	ANL	Service Provider not licensed to provide requested service
		Valid for LIN05 = CE, HI, HU, SI
	ANM	Competitive Retail Energy Supplier not certified by Utility
		Valid for LIN05 = CE
	API	Required information missing (REF03 Required)
		Valid for LIN05 = CE, HI, HU, SI Explanation Required in REF03
	ATI	Account Type Invalid
		Valid for LIN05 = CE Type of account cannot be enrolled in program
	B30	Currently Enrolled
		Valid for LIN05 = CE Used to indicate that the customer is already enrolled with the CRES that is requesting enrollment. EDU is rejecting due to duplicate request (DP&L only)
	C02	Customer is on Credit Hold
		Valid for LIN05 = CE Only applicable if the CRES requests EDU Consolidated Billing and the customer arrears exceeds limits outlined in purchase of receivables contract between the EDU and CRES
	CMP	Customer locked with ESP
		Valid for LIN05 = CE The customer has enrolled with another CRES. The customer cannot be enrolled until the pending enrollment is complete.
	D76	Duns Number Invalid or Not Found
		Valid for LIN05 = CE, HI, HU, SI
	DIV	Date/Time Invalid or Missing
		Valid for LIN05 = CE
	FCD	Future Contract Date Not Supported
		Valid for LIN05 = CE
	FRB	Incorrect Billing Type (REF~BLT) Requested
		Valid for LIN05 = CE
	FRC	Incorrect Bill Calculation method (REF~PC) Requested
		Valid for LIN05 = CE
	FRH	Bill Option Not Valid – Net Metered Account (AEP Only)
		Valid for LIN05 = CE
	FRI	Bill Option Not Valid – Payment Agreement (AEP Only)
		Valid for LIN05 = CE
	FRJ	Bill Option Not Valid – Account in Arrears (AEP Only)
		Valid for LIN05 = CE
	IAC	Invalid Aggregation Code
		Valid for LIN05 = CE The REF03 in REFPG is incorrect
	IAT	Invalid Aggregation Indicator
		Valid for LIN05 = CE The REF02 in the REFPG is incorrect
	IBP	Invalid Billing Program ID
		Valid for LIN05 = CE Billing program ID requested is not valid for AEP's TOU program

			IMR	Invalid Meter Register	
				Valid for LIN05 = CE Meter is not programmed for the requested AEP TOU program	
			M76	Invalid Meter	
				Valid for LIN05 = CE, HI, HU, SI	
			MIP	Meter Installed Pending	
			MSU	Minimum Stay Unsatisfied	
				Valid for LIN05 = CE	
			MTI	Maintenance Type Code (ASI02) Invalid	
				Valid for LIN05 = CE, HI, HU, 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	
			NFI	Not First In	
				Valid for LIN05 = CE The customer has enrolled with another CRES. The customer cannot be enrolled until the pending enrollment is complete.	
			NLI	Not Last In	
				Valid for LIN05 = CE The customer has enrolled with another CRES.	
			NMI	No Meter Installed	
				Valid for LIN05 = CE New account, no meter installed yet.	
			SDP	Invalid Service Delivery Identification Number	
				Valid for LIN05 = CE, HI, HU, SI	
			SSR	Secondary Service Rejected	
				Valid for LIN05 = HI, HU, SI Secondary Service not performed because Primary Service was rejected.	
			UND	Cannot Identify CRES	
				Valid for LIN05 = CE, HI, HU, SI	
			UNE	Cannot Identify EDU	
				Valid for LIN05 = CE, HI, HU, SI	
			W05	Requested Rate not found or not in effect on the effective date (rate ready only)	
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 (Billing Type)			

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:

CE Request:	Required
CE Accept Response:	Required
CE Reject Response:	Not Used
All other Requests:	Not Used
All other Responses:	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.	
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	Energy Supplier Consolidated Billing	
				The CRES bills the customer.	
			LDC	Utility 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:	Request: Not Used
		CE Accept Response: Required
		All other Accept Response: Not Used
		REF~BF~11

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.	
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:		
	CE Request:	Not Used
	CE Accept Response:	Required if Net Meter is present (AEP, DP&L & FirstEnergy Only)
	CE Reject Response:	Not Used
	All other Requests:	Not Used
	All other Responses:	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 (EDU Budget Billing Status)
		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 to convey the budget billing status at the point of time of the enrollment. An 814 change will not be sent if the status changed.
Request: Not Used
CE Accept Response: Required
All other Responses: Not Used
REF~NR~Y

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			NR Progress Payment Number		
			EDU Budget Billing Status		
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		
			N No		
			The EDU is not budget billing the EDU charges for this customer.		
			Y Yes		
			The EDU is budget billing the EDU charges for this customer.		

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

Segment: **REF** Reference Identification (Party Calculating the 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:

CE Request:	Required
CE Accept Response:	Required
CE Reject Response:	Not Used
All other Requests:	Not Used
All other Responses:	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		
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:	CE Request: Required when a net metering contract has been entered into with a customer-generator	

CE Accept Response: Conditional – Required if sent on Request
CE Reject Response: Not Used

All other Requests: Not Used
All other Responses: Not Used

Multiple REF~PID segments may be sent on an 814 Enrollment Request/Response to enroll customer in multiple programs.

REF~PID~TOD2

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 (AEP Only)		
			CPP3 3 Tier plus Critical Peak Pricing (AEP Only)		
			SC Smart Cooling (AEP Only)		
			CNM CRES Net Metering		

Segment:		**REF** Reference Identification (Government Aggregation)		

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: CE Request Response: Required if Customer is being put on government aggregation (FirstEnergy, AEP, Duke Energy Ohio, and DP&L). Required by FirstEnergy only if Customer is being put on non-government aggregation.
CE Accept Response: Required if sent on Request
CE Reject Response: Not Used

All other Requests: Not Used
All other Responses: 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 FirstEnergy, AEP, Duke Energy Ohio, and DP&L		
			AGG Group (Non Government) Aggregation FirstEnergy only		
			GAX Governmental 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		
			Required for FirstEnergy when the account is associated with an aggregation. Required for AEP and 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 the EDU. For FirstEnergy only, If the information provided in the Group Aggregation Code does not meet validation criteria, the enrollment will be accepted but a REF*1P loop will be sent with an A13 message in the response stating "Invalid group aggregation code". For AEP and DP&L the enrollment will be rejected if the information provided does not meet the validation criteria.		

Segment:		**REF** Reference Identification (Standard Interconnection Point)		
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		
	CE Accept Response:	Optional		
	All other Responses:	Not Used		
	REF~SPL~~MESA SUBSTATION			

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			SPL Standard Point Location Code (SPLC)		
			Point at which the utility's distribution system is connected to the transmission grid for the Service Delivery Point (SDP).		
M	REF03	352	**Description**	X	AN 1/80
			A free-form description to clarify the related data elements and their content		
			Standard Interconnection Point – Note REF03 is used, not REF02.		

		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 1 per transaction
REF~Q5~9876543245678DCH

Data Element Summary

	Ref. Des.	Data 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:		**DTM** Date/Time Reference (Contract 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:		This segment will be used by the EDU only if more than one request for a customer is received on the same day. Time zone will always be Eastern Prevailing time.		

CE Request:	Required
CE Accept Response:	Required
CE Reject Response:	Not Used
All other Requests:	Not Used
All other Responses:	Not Used

DTM~129~19990115~1523
DTM~129~19990115~1523~CT

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

129	Customer Contract Effective

The date/time the customer agreed to obtain service from the CRES

	Ref. Des.	Data Element	Name	Attributes
M	DTM02	373	Date	X DT 8/8

Date expressed as CCYYMMDD

Date

	Ref. Des.	Data Element	Name	Attributes
M	DTM03	337	Time	X TM 4/8

Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

	Ref. Des.	Data Element	Name	Attributes
C	DTM04	623	Time Code	O ID 2/2

Code identifying the time. In accordance with International Standards Organization standard 8601, time can be specified by a + or - and an indication in hours in relation to Universal Time Coordinate (UTC) time; since + is a restricted character, + and - are substituted by P and M in the codes that follow

Conditional - Only used if the time is other than Eastern time.

CT	Central Time
ET	Eastern Time
MT	Mountain Time
PT	Pacific Time

	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:	Request: Not Used

Request:	Not Used
CE Accept Response:	Required unless pending a meter change (REF~1P = MIP)
All other Responses:	Not Used
DTM~150~19990115	

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

150	Service Period Start	

The date energy is expected to flow for this customer for the CRES.

	Ref. Des.	Data Element	Name	Attributes
M	DTM02	373	Date	X DT 8/8

Date expressed as CCYYMMDD

Date expressed as CCYYMMDD

	Segment:	**AMT** Monetary Amount (Number of Months)
	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:	Request: Not Used
		CE Accept Response: Required
		All other Responses: Not Used
		AMT~LD~13

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	AMT01	522	**Amount Qualifier Code**	M ID 1/3
			Code to qualify amount	
			LD Incremental	
			The number of months over which the Total kWh is calculated.	
M	AMT02	782	**Monetary Amount**	M R 1/18
			Monetary amount	
			Number of Months	

Segment:	**AMT** Monetary Amount (Peak Demand)				
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:	Request:	Not Used
	CE Accept Response:	Required if the meter measures demand, otherwise not used.
	All other Responses:	Not Used
	AMT~MA~423899.2	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	**AMT01**	**522**	**Amount Qualifier Code**	**M**	**ID 1/3**
			Code to qualify amount		
			MA Maximum Amount		
			Peak Demand or Maximum Daily Quantity (MDQ).		
M	**AMT02**	**782**	**Monetary Amount**	**M**	**R 1/18**
			Monetary amount		
			Peak Demand (kW)		

Segment:	**AMT** Monetary Amount (Budget 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:	Request: Conditional: Required if EDU is FirstEnergy and customer is on budget billing, not used for other EDUs. Response: Not Used AMT~B5~80.00			

Data Element Summary

	Ref. Des.	Data 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 1/18**
			Monetary amount		
			Monthly Budget Amount		

Segment: **AMT** **Monetary Amount (Annual kWh Total)**
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:

Request:	Not Used
CE Accept Response:	Required
All other Responses:	Not Used
AMT~TA~12345678.9	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	AMT01	522	**Amount Qualifier Code**	**M ID 1/3**
			Code to qualify amount	
			TA Total Annual Sales	
			Total kWh	
M	AMT02	782	**Monetary Amount**	**M R 1/18**
			Monetary amount	
			Total kWh	

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:

Request:	Not Used
CE Accept Response:	Required for PJM Participants only
All other Accept:	Not Used

The value provided is at the Account or Service Delivery Identifier Number (SDI) level for AEP. Zero values may be sent if the EDU is, in fact, stating that there is no contribution for this customer's account or SDI 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).

Must Use	AMT02	782	Monetary Amount	M R 1/18

Monetary amount
Peak Load Contribution

Segment:	**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:

Request:	Not Used
CE Accept Response:	Required for PJM Participants only
All other Accept:	Not Used

The value provided is at the Account or Service Delivery Identifier Number (SDI) level for AEP. Zero values may be sent if the EDU is, in fact, stating that there is no contribution for this customer's account or SDI.

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).

	Ref. Des.	Data Element	Name	X12 Attributes	
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)

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 - use "ALL"
CE Accept Response: Required. One NM1 Loop must be provided for each
Meter number. (NM109=ALL is not valid on the Response)

All other Responses: 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	
			MQ Metering Location	
M	NM102	1065	**Entity Type Qualifier**	M ID 1/1
			Code qualifying the type of entity	
			3 Unknown	
M	NM108	66	**Identification Code Qualifier**	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			32 Assigned by Property Operator	
			Meter Number	
			93 Code assigned by the organization originating the transaction set	
			This code used when a Meter Number is NOT provided in NM109 (i.e., when NM109 contains "ALL" or "UNMETERED").	
M	NM109	67	**Identification Code**	X AN 2/80
			Code identifying a party or other code	
			Request: ALL for ALL meters Response: Meter Number or UNMETERED - for Unmetered Services 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 (Meter Multiplier)

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

Request: Not Used
CE Accept Response: Required for each meter type for each meter that is used for billing purposes. This segment will not be provided in the NM1 loop for UNMETERED services.
All other Responses: Not Used
REF~4P~10~KHMON~TU^41
REF~4P~1~K1MON~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

| | | 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
	Shoulder
51	Totalizer

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

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

Request: Not Used
CE Accept Response: Required for each meter type for each meter that is used
                            For billing purposes that has dials. This segment will not be
                            Provided in the NM1 loop for UNMETERED services or for
                            Demand.
All other Responses: 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 Peak
	Shoulder
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:
Request: Not Used
CE Accept Response: Required for AEP Ohio and FirstEnergy companies; optional for DP&L and Duke Energy Ohio

All other Responses: Not Used

REF~LF~2

Data Element Summary

	Ref. Des.	Data Element	Name		X12 Attributes	
M	REF01	128	**Reference Identification Qualifier**		M	ID 2/3
			Code qualifying the Reference Identification			
			LF Load Planning Number			
			Loss Factor			
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			
			Loss Factor			

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:	Request:	Not Used
	CE Accept Response:	Required for each non-interval meter that is used for billing purposes. This segment must also be sent when account has UNMETERED services. If a Load Profile does not exist for this customer, this segment will not be sent.
	All other Responses:	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)

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.

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.

Request:	Not Used
CE Accept Response:	Required for each meter that is used for billing purposes. This segment will not be provided in the NM1 loop for UNMETERED services.
All other Responses:	Not Used

REF~MT~KHMON
REF~MT~T9DAY
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:	Request:	Not Used
		CE Accept Response:	Required for each meter that is used for billing purposes. This segment must also be sent when account has UNMETERED services available.
		All other Responses:	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 Revenue Class)

Segment: **REF** Reference Identification (EDU Rate Revenue 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:

Request:	Not Used
CE Accept Response:	Required if maintained by utility, must be sent for each meter that is used for billing purposes. This segment must also be sent when account has UNMETERED services available.
All other Responses:	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 Revenue Class - 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 Revenue Class		

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

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: Rate codes are established between the EDU and the CRES prior to enrollment.

CE Request: Required if the EDU is calculating the CRES charges (Rate Ready)
CE Accept Response: Required if the EDU is calculating the CRES charges (Rate Ready)
All other Responses: Not Used
REF~RB~OH87
REF~RB~OH87~10000

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		
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		
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: Request: Not Used
CE Accept Response: Required for AEP Ohio and FirstEnergy companies; optional for DP&L and Duke Energy Ohio

All other Responses: 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		
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.

Request:	Not Used
CE Accept Response:	Required for each meter type for each non-interval meter that is used for billing purposes.
All other Responses:	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 Peak
	Shoulder
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)

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: Meter cycles will be provided on the EDU's website.

CE Request: Not Used
All other Requests: Not Used
CE Accept Response: Required for each meter that is used for billing purposes.
For unmetered services, the billing cycle is provided.
All other Responses: 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:	**REF** Reference Identification (Congestion/Curtailment Zone)

Segment: **REF** Reference Identification (Congestion/Curtailment Zone)
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:	Not Used
CE Accept Response:	Required if available
All other Responses:	Not Used
REF~ZW~SOUTHWEST	

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
M	REF01	128	**Reference Identification Qualifier**	M	ID 2/3
			Code qualifying the Reference Identification		
			ZW Area		
			Congestion/Curtailment Zone - a geographic area where there are transmission constraints related to the delivery of energy.		
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		
			Congestion/Curtailment Zone		

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		

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