

Ohio Electric Implementation Guideline

**For
Electronic Data Interchange**

TRANSACTION SET

810

LDC Invoice Bill Ready

Ver/Rel 004010

Summary of Changes

Version 1.0.0
May 1, 2001

Version 1.5.0
May 1, 2001

Version 2.0.0
December 31, 2001
Version 2.1.0
June 30, 2002

Version 2.2.0
October 1, 2005

Version 2.3.0
March 9, 2010

Version 2.4.0
February 14, 2012

Initial Release

- Change valid REF02 values in REF*PC segment from “ESP” and “LDC” to “DUAL” per Change Control 12.
- Add N103 and N104 to Customer Name segment for store number per Change Control 21.
- Remove the Summary pages (usually pages 2 and 3) from the implementation guides. These pages are automatically created by Foresight, but the last round of changes to the documents was done in Word and has not been updated in Foresight per Change Control 22.
- Added the SAC03 and SAC04 elements to the Bill Ready transaction set per Change Control 24.
- No Changes
- Changed the example in the BIG segment to make the BIG07 a valid code per Change Control 46
- Added “Bill Ready” to the title page
- Added note to N1~8R segment to show AP validates on first 4 characters of customer name per change control 48.
- Added text to title on N1 pages to show which N1 per change control 50
- Updated REF~Q5 gray boxes to show SDID per change control 51
- Added gray box to the REF02 in the REF~PC segment
- Added gray box to the DTM01 of the DTM~150 segments
- Added gray box to the DTM01 of the DTM~151 segments
- Changed “*” to “~” in the examples
- No Changes
- 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.
- Incorporated AEP’s administrative changes as per EDI Change Control 70.
- Incorporated First Energy’s administrative changes as per EDI Change Control 81.
- Added Notes Section as per EDI Change Control 85.

Version 2.5.0 February 15, 2013	<ul style="list-style-type: none"> • Incorporated DP&L's addition of Bill Ready billing as per EDI Change Control 87. • Incorporated FE's support of auto cancel of bill ready invoice and bill ready bill messaging as per EDI Change Control 94 • Incorporated Duke Energy Ohio's addition of Bill Ready billing as per EDI Change Control 95. Duke to implement CC95 by 9/30/2013, actual implementation date TBA by Duke.
Version 2.6.0 March 24, 2014	<ul style="list-style-type: none"> • Incorporated Change Control 107 (Duke support of 810 auto cancel & bill messaging) • Incorporated Change Control 113 (Correct notes for Duke 810 auto cancel) • Incorporated Change Control 116 (AEP support of 810 auto cancel)
Version 2.6.1 February 13, 2015	<ul style="list-style-type: none"> • Incorporated Change Control 119 (Remove 'N' from SAC01) • Incorporated Change Control 121 (DP&L's support of 810 auto cancel) • Corrected missed bill window process under notes section for Duke Energy Ohio
Version 2.6.2 February 11, 2016	<ul style="list-style-type: none"> • Incorporated Change Control 132 (Add list of supported SAC04 codes for AEP & Dayton) • Incorporated Change Control 136 (Correct Cancellation/Re-bill Scenario notes for Duke Energy Ohio)
Version 2.6.3 January 3, 2017	<ul style="list-style-type: none"> • Incorporated Change Control 138 (As stated earlier this year, FirstEnergy moved from allowing a maximum of 7 SAC line item charges per EDI 810 Bill Ready invoice to no maximum)
Version 2.6.3 January 3, 2017	<ul style="list-style-type: none"> • Incorporated Change Control 143 (Update the 810BR implementation guide to correct the notes on Negative Total Invoice to show Duke Energy OH does not support)

General Notes

Bill Ready EDUs:	<ul style="list-style-type: none"> • AEP (Columbus Southern & Ohio Power) • First Energy (Cleveland Illuminating, Ohio Edison, Toledo Edison) • Dayton Power & Light • Duke Energy Ohio (must implement bill ready no later than 9/30/2013)
Sending Multiple 810s:	<ul style="list-style-type: none"> • The dates (DTM segments) in the 810 must match the dates (DTM segments) in the corresponding 867. DP&L will not validate dates. • Its recommended prior period charges be sent in separate 810 transactions. (ST segment to SE segment) within one ISA. Separate transactions (1-867 to 1-810) provide reconciliation within the EDU's system. • Utilities will initiate the billing process upon the receipt of the current charges so Suppliers must ensure prior period charges are received prior to the current charges during the current bill window. • DP&L will only validate the reference number of the 810 matches the reference number on the 867. It is the supplier's responsibility to provide the desired dates in the 810 that will be displayed on the bill.
Cancellation / Re-bill Scenarios: Directly Related to Usage	<p>AEP/First Energy/DP&L/ Duke Energy Ohio -</p> <ul style="list-style-type: none"> • The 867 cancel automatically cancels the Supplier's 810. The Supplier should not send the 810 Cancel upon receipt of 867 Usage Cancel.
Cancellation / Re-bill Scenarios: Not Related to Usage	<ul style="list-style-type: none"> • Supplier will send their 810 Reversal (BIG08 = "17"). The service period dates must match original bill period. The total of reversed charges will show as a line item on the bill and must equal the total charges on the original 810. DP&L will not validate dates. • The cross-reference number (BIG05) must be provided. • First Energy - The 810 Reversal (BIG08=17) can be received at any time prior to or in the same ISA as the Reissue (BIG08=18), the 810 Reissue (BIG08 = "18") is not required to be received during the billing window. • Supplier will send their 810 Reissue (BIG08 = "18"). The service period dates must match original bill period. DP&L will not validate dates and requires the 810 Reissue to be received during the open billing window. Duke Energy Ohio will accept the 810 Reissue at any time providing the 810 Reversal is received prior to the 810 Reissue.
Cancellation / Re-bill Scenarios: Bill Option Change	<ul style="list-style-type: none"> • AEP/First Energy/DP&L/ Duke Energy Ohio – The bill type that was in effect at time of the original bill period will be used. • EDU must send separate 867 cancels (one for each service period) affected by the cancel/re-bill situation. • EDU may send separate 867 re-bills, one for each service period being re-billed or combine the re-bill into one 867 covering the entire re-bill period. If combining, the EDU must send separate 867 re-bills for each billing option during the entire re-bill period (Ex – Cancel period spans 6 months, bill option changed from dual to bill ready effective start of month 4. One 867 re-bill under dual for months 1-3, second 867 re-bill under bill ready for months 4-6).
Cancellation / Re-bill Scenarios: No Longer Supplier of Record	<ul style="list-style-type: none"> • AEP - may send cancel/re-bills to a supplier even if they aren't the current supplier. Will re-bill under the bill option in effect during the original billing. • First Energy - may send cancel/re-bill to supplier even if they're no longer the current supplier of record for the customer. Bill option in effect during the original billing will be used. Statute of limitations for rebilling is 4 years. • DP&L will only consolidate bill for current supplier. For the previous supplier, the re-billing must be handled under dual billing. • Duke Energy Ohio – may send a cancel/re-bill to supplier even if they're no longer the current supplier of record for the customer. Bill option in effect during the original billing will be used. Statute of limitations for rebilling is 18 months.
Cross Reference Number between 867, 810, and 820	<p>There is a cross reference between billing related documents.</p> <ul style="list-style-type: none"> • 867 – BPT02 – This document establishes the cross reference number. • 810 – BIG05 – This document must have the cross reference number from the respective 867. • 820 – REF6O (letter O) – When making the other party whole, the 820 to the non-billing party must also include the cross reference number from 867/810 document. DP&L –Not applicable since not purchasing receivables.

Charge Lines: Max number of charges per 810	<ul style="list-style-type: none"> • AEP – 20 • First Energy – -No Maximum (while there is no limit, an excessive number of supplier charges would risk formatting issues in the supplier section on the FirstEnergy bill) • DP&L –20 lines per 810; Must be in the Account type within 1 loop of an IT1. DP&L will reject entire invoice if greater than 20 or if total of all lines do not match invoice total. • Duke Energy Ohio – 10 <p>Any additional charges over the above maximum limits will not be included in the bill and no rejection will be sent to the CRES.</p>
Permits Non-Commodity Charges	<p>Non-Commodity Charges could be: Early Termination Fee, Late Payment Fee, Meter Fee, Account Services Fee, Monthly Customer Fee, etc.</p> <ul style="list-style-type: none"> • AEP – Yes • First Energy – Yes • DP&L – Yes • Duke Energy Ohio – No, except for Monthly Customer Fee
Negative Total Invoice:	<ul style="list-style-type: none"> • AEP – Yes • First Energy – Yes • DP&L – Yes • Duke Energy Ohio - No
SAC04 Codes	<ul style="list-style-type: none"> • AEP and DP&L - requires a specific list of authorized SAC04 codes. In the event the Supplier sends a code not on the list, the 810 invoice will be rejected. Codes may be found on the appropriate Supplier Support website. • First Energy and Duke Energy Ohio – does not use SAC04 codes
Max number of characters in SAC15	<ul style="list-style-type: none"> • AEP - 70 (expanding to 80) • First Energy – 80 • DP&L – 58 • Duke Energy Ohio – 70. Up to 35 characters are displayed on one line of the bill and the second line displays immediately below the first line and will contain a maximum of 35 characters. The second line will begin at a logical break (blank space) in the first 35 characters. The SAC05 information is displayed on the same line where the SAC15 information ends and appears off to the right in a column of supplier charges.
Budget Billing	<p>AEP / First Energy / DP&L:</p> <ul style="list-style-type: none"> • Budget billing for the CRES portion of the bill is not on the Utility Consolidated Bill. Each EDU will continue to offer Budget Billing on the Utility portion of the bill. • Should the CRES wish to budget bill a customer's charges, the CRES will need to calculate the budget, maintain budget balance, and send a budget amount as the current charge. Each EDU will remit on the amount sent in the EDI 810 regardless if it's a budgeted or actual charge. Recommend CRES use bill message (if supported by EDU) to convey the budget billing balance information to the customer. <p>Duke Energy Ohio</p> <ul style="list-style-type: none"> • Duke Energy Ohio calculates a single budget billing amount that includes gas distribution charges (as applicable), gas supplier charges (as applicable), electric distribution charges, and electric supplier charges. Supplier budget billing is not supported by Duke Energy Ohio.
Missed Bill Window	<ul style="list-style-type: none"> • AEP – does NOT send 824 OBW, holds supplier's late invoice and presents on customer's next bill. • First Energy & Duke Energy Ohio – sends 824 OBW, holds supplier's late invoice, displays message on bill notifying the customer and presents late invoice on customer's next bill. • DP&L - will reject 810s sent outside the bill window and will send 824 OBW rejection. A bill message will display indicating the charges were not available at the time of billing for current month(s) in CRES section of customer bill.
Bill Messaging	<ul style="list-style-type: none"> • AEP – supports up to 3 lines of 80 characters each in NTE segment. • First Energy – Two lines of 80 characters for either NTE*ADD or NTE*OTH. EGS may send combination of ADD or OTH but only a maximum of two NTE lines will be printed. • DP&L – supports up to 3 lines of 76 characters each in NTE ADD segment. DP&L will truncate and post as is with no wrapping or concatenation of lines. DP&L will only display messages related to 810s for the current month. When there are multiple 810s for the current month, the bill messages related to the most recent usage date 810 will be displayed. • Duke Energy Ohio – supports up to 2 lines of 70 characters each in the NTE*ADD segment and 1 line of 70 characters in the NTE*OTH segment.

810 Invoice

Functional Group ID=**IN**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Transaction Set Notes

1. Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

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

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			810 Invoice	
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: **BIG** Beginning Segment for Invoice

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Syntax Notes:

Semantic Notes:

- 1 BIG01 is the invoice issue date.
- 2 BIG03 is the date assigned by the purchaser to purchase order.
- 3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

Comments: 1 BIG07 is used only to further define the type of invoice when needed.

Notes: Required

BIG~19990201~19990201123500001~~~2048392934504~~ME~00

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	BIG01	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			Date the bill was created.	
M	BIG02	76	Invoice Number	M AN 1/22
			Identifying number assigned by issuer	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over 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	BIG05	328	Release Number	O AN 1/30
			Number identifying a release against a Purchase Order previously placed by the parties involved in the transaction	
			The cross-reference number originally transmitted in the 867 in the BPT02 must be sent in the BIG05.	
M	BIG07	640	Transaction Type Code	O ID 2/2
			Code specifying the type of transaction	
			ME Memorandum	
M	BIG08	353	Transaction Set Purpose Code	O ID 2/2
			Code identifying purpose of transaction set	
			00 Original	
			17 Cancel, to be Reissued	
			Reversal - used when 810 cancellation is not related to usage.	
			18 Reissue	
			Used in combination with code 17 - Reversal, to re-bill the charges that were previously reversed.	

Segment: **NTE** Note/Special Instruction (CRES Messages and Notices)
Position: 030
Loop:
Level: Heading
Usage: Optional
Max Use: 100
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Syntax Notes:

Semantic Notes:

Comments: **1** The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

Notes: Used for required messages and notices
 Optional. If provided, will be printed on the bill. Can be repeated for maximum of two lines, 80 characters each.

NTE~ADD~CRES MESSAGES
 NTE~ADD~LINE TWO OF MESSAGES

Data Element Summary

	Ref.	Data		Attributes
	Des.	Element	Name	
M	NTE01	363	Note Reference Code	O ID 3/3
			Code identifying the functional area or purpose for which the note applies	
			ADD Additional Information	
			CRES Messages	
M	NTE02	352	Description	M AN 1/80
			A free-form description to clarify the related data elements and their content	
			Text	

Segment:	NTE Note/Special Instruction (Applicable Regulatory Authority Mandated Messages and Notices)
Position:	030
Loop:	
Level:	Heading
Usage:	Optional
Max Use:	100
Purpose:	To transmit information in a free-form format, if necessary, for comment or special instruction
Syntax Notes:	
Semantic Notes:	
Comments:	<p>1 The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.</p>
Notes:	<p>Used for required Regulatory messages and notices.</p> <p>Optional. If provided, will be printed on the bill. Can be repeated for maximum of two lines, 80 characters each.</p> <p>NTE~OTH~REGULATORY REQUIRED MESSAGES OR NOTICES NTE~OTH~LINE TWO OF REGULATORY MESSAGES</p>

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	NTE01	363	Note Reference Code	O ID 3/3
			Code identifying the functional area or purpose for which the note applies	
			OTH Other Instructions	
			Applicable regulatory authority mandated messages or notices	
M	NTE02	352	Description	M AN 1/80
			A free-form description to clarify the related data elements and their content	
			Text	

Segment:	REF	Reference Identification (CRES Account Number)
Position:	050	
Loop:		
Level:	Heading	
Usage:	Optional	
Max Use:	12	
Purpose:	To specify identifying information	
Syntax Notes:	1	At least one of REF02 or REF03 is required.
	2	If either C04003 or C04004 is present, then the other is required.
	3	If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1	REF04 contains data relating to the value cited in REF02.
Comments:		
Notes:	Account numbers will only contain uppercase letters (A to Z) and digits (0 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. Required if provided on the enrollment or change transaction. REF~11~395871290	

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

Segment:	REF	Reference Identification (EDU Account Number)
Position:	050	
Loop:		
Level:	Heading	
Usage:	Optional	
Max Use:	12	
Purpose:	To specify identifying information	
Syntax Notes:	1	At least one of REF02 or REF03 is required.
	2	If either C04003 or C04004 is present, then the other is required.
	3	If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1	REF04 contains data relating to the value cited in REF02.
Comments:		
Notes:	Account numbers will only contain uppercase letters (A to Z) and digits (0 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. Required for all utilities except AEP, which will use Service Delivery Identification Number. First Energy requires 20 digit Customer Number REF~12~39205810578	

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

Segment: **REF** **Reference Identification (Billing Type)**
Position: 050
Loop:
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: Required
REF~BLT~LDC

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			BLT Billing Type	
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 BLT, valid values for REF02 are:	
			ESP ESP Bills the Customer	
			LDC LDC Bills the Customer	

Segment: **REF** Reference Identification (Original Transaction Reference Number)
Position: 050
Loop:
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

Semantic Notes:

- 1 REF04 contains data relating to the value cited in REF02.

Comments:
Notes: Required on a Cancel (BIG08=01 or 17) transaction.
REF~OI~123456789019990102

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			OI	Original Invoice Number
			Sent when BIG08 = 01 or 17.	
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	
			Original Invoice Number	

Segment:	REF Reference Identification (Party Calculating the Charges)
Position:	050
Loop:	
Level:	Heading
Usage:	Optional
Max Use:	12
Purpose:	To specify identifying information
Syntax Notes:	1 At least one of REF02 or REF03 is required. 2 If either C04003 or C04004 is present, then the other is required. 3 If either C04005 or C04006 is present, then the other is required.
Semantic Notes:	1 REF04 contains data relating to the value cited in REF02.
Comments:	
Notes:	Required REF~PC~LDC

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			PC Production Code	
			Identifies the party that calculates the 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 Each party calculates their own charges	
			Party calculating the charges to be put on the bill.	

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. Maximum use of 1 per transaction REF~Q5~9876543245678DCH

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

Segment: **N1** Name (8S - EDU)
Position: 070
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.
Notes: Required
N1~8S~EDU COMPANY~1~007909411

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

Segment: **N1** Name (SJ - CRES)
Position: 070
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is present, then the other is required.
Semantic Notes:
Comments: 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2 N105 and N106 further define the type of entity in N101.
Notes: Required

N1~SJ~CRES COMPANY~9~007909422CRES

Data Element Summary

Ref.	Des.	Data Element	Name		Attributes	
			Entity Identifier Code		M ID 2/3	
M	N101	98	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			
M	N103	66	CRES Name			
			Identification Code Qualifier		X ID 1/2	
			Code designating the system/method of code structure used for Identification Code (67)			
M	N104	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			

Segment:	N1 Name (8R - Customer)
Position:	070
Loop:	N1 Optional
Level:	Heading
Usage:	Optional
Max Use:	1
Purpose:	To identify a party by type of organization, name, and code
Syntax Notes:	1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. 2 N105 and N106 further define the type of entity in N101.
Notes:	Required N1~8R~CUSTOMER NAME N1~8R~CUSTOMER NAME~92~STORE 7391

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			8R Consumer Service Provider (CSP) Customer	
			Customer	
M	N102	93	Name	X AN 1/60
			Free-form name	
			Customer name as documented in the sender's application system.	
C	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
			Condition: Required when available.	
			92 Assigned by Buyer or Buyer's Agent	
			Store Number or other Reference number meaningful to the customer.	
C	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Store Number or Reference number meaningful to the customer. Note that this number is assigned by the EDU and may or may not be applicable to the CRES.	

Segment: **IT1** **Baseline Item Data**
Position: 010
Loop: IT1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

- Syntax Notes:**
- 1 If any of IT102 IT103 or IT104 is present, then all are required.
 - 2 If either IT106 or IT107 is present, then the other is required.
 - 3 If either IT108 or IT109 is present, then the other is required.
 - 4 If either IT110 or IT111 is present, then the other is required.
 - 5 If either IT112 or IT113 is present, then the other is required.
 - 6 If either IT114 or IT115 is present, then the other is required.
 - 7 If either IT116 or IT117 is present, then the other is required.
 - 8 If either IT118 or IT119 is present, then the other is required.
 - 9 If either IT120 or IT121 is present, then the other is required.
 - 10 If either IT122 or IT123 is present, then the other is required.
 - 11 If either IT124 or IT125 is present, then the other is required.

Semantic Notes: 1 IT101 is the purchase order line item identification.

- Comments:**
- 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
 - 2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: ACCOUNT: Used to convey charges that apply to the entire account.
 Required if there are account level charges
 IT1~1~~~~SV~EL~C3~ACCOUNT

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	IT101	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set Sequential Line Item Counter	O AN 1/20
M	IT106	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SV Service Rendered	X ID 2/2
M	IT107	234	Product/Service ID Identifying number for a product or service There may be only one commodity (Electric) for each 810 transaction. EL Electric Service	X AN 1/48
M	IT108	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) C3 Classification	X ID 2/2
M	IT109	234	Product/Service ID Identifying number for a product or service ACCOUNT Charges/Taxes at an Account Level	X AN 1/48

Segment:	DTM Date/Time Reference (Service Period Start)
Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required. 2 If DTM04 is present, then DTM03 is required. 3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	The full service period should match the PTD~SU, PTD~BO, and/or PTD~BC loops from the applicable 867. Required DTM~150~19991224

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

Segment:	DTM Date/Time Reference (Service Period End)
Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required. 2 If DTM04 is present, then DTM03 is required. 3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	The full service period should match the PTD~SU, PTD~BO, and /or PTD~BC loops from the applicable 867. Required DTM~151~20000124

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

Segment:	SLN Subline Item Detail
Position:	200
Loop:	SLN Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify product subline detail item data
Syntax Notes:	<ol style="list-style-type: none"> 1 If either SLN04 or SLN05 is present, then the other is required. 2 If SLN07 is present, then SLN06 is required. 3 If SLN08 is present, then SLN06 is required. 4 If either SLN09 or SLN10 is present, then the other is required. 5 If either SLN11 or SLN12 is present, then the other is required. 6 If either SLN13 or SLN14 is present, then the other is required. 7 If either SLN15 or SLN16 is present, then the other is required. 8 If either SLN17 or SLN18 is present, then the other is required. 9 If either SLN19 or SLN20 is present, then the other is required. 10 If either SLN21 or SLN22 is present, then the other is required. 11 If either SLN23 or SLN24 is present, then the other is required. 12 If either SLN25 or SLN26 is present, then the other is required. 13 If either SLN27 or SLN28 is present, then the other is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 SLN01 is the identifying number for the subline item. 2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials. 3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item. 4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.
Comments:	<ol style="list-style-type: none"> 1 See the Data Element Dictionary for a complete list of IDs. 2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1. 3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes:	<p>The IT1/SLN segment (Position 200) is used to overcome the limitation of 25 IT1/SAC loops (Position 180). Each SLN loop will only contain one SAC. Multiple charges/allowances require multiple SLN loops.</p> <p>Required SLN~1~~A</p>

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	SLN01	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set Used as a loop counter	M AN 1/20
M	SLN03	662	Relationship Code Code indicating the relationship between entities A Add	M ID 1/1

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail

Usage: Optional

Max Use: 25

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
 - 2 If either SAC03 or SAC04 is present, then the other is required.
 - 3 If either SAC06 or SAC07 is present, then the other is required.
 - 4 If either SAC09 or SAC10 is present, then the other is required.
 - 5 If SAC11 is present, then SAC10 is required.
 - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
 - 7 If SAC14 is present, then SAC13 is required.
 - 8 If SAC16 is present, then SAC15 is required.

- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
 - 2 SAC05 is the total amount for the service, promotion, allowance, or charge.
If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
 - 3 SAC08 is the allowance or charge rate per unit.
 - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount that is applicable to service, promotion, allowance, or charge.
 - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
 - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
 - 7 SAC16 is used to identify the language being used in SAC15.

- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
 - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Notes: Each SLN loop will contain only one SAC. Multiple charges/allowances require multiple SLN loops.
Required
SAC~C~D140~~~500~~~MO~1~~~2~~CUSTOMER CHARGES: \$5.00
SAC~C~D140~EU~GEN001~500~~~MO~1~~~2~~CUSTOMER CHARGES: \$5.00

Data Element Summary

Ref.	Des.	Data Element	Name	Attributes
M	SAC01	248	Allowance or Charge Indicator	M ID 1/1
			Code which indicates an allowance or charge for the service specified	
			C Charge	
M	SAC02	1300	Service, Promotion, Allowance, or Charge Code	X ID 4/4
			Code identifying the service, promotion, allowance, or charge	
			D140 Forwarding Charge	
			Bill Ready - Actual Charges	
C	SAC03	559	Agency Qualifier Code	X ID 2/2
			EU Electric Utilities	
			Conditional – Use of this field will be agreed upon by the EDU and CRES.	
C	SAC04	1301	Energy Charges	X AN 1/10
			Required – AEP & DP&L	
			Not Used – Duke Energy Ohio & FirstEnergy	

			ADJ002	Adjustment		
			BAS001	Basic Customer Charge		
			BAS002	Special Billing Charge		
			BUD001	Budget Billing Amount		
			BUD002	Budget Billing Settlement		
			DMD001	Demand Charge		
			ENC001	Energy Charge		
			ENC020	Night Charge		
			ENC022	Flat Bill		
			GEN001	Generation Charge		
			GEN002	Generation - Measured		
			GEN003	Generation - Adjusted		
			GEN004	Generation - Billed		
			GTC002	Generation & Transmission		
			GTC004	Generation & Transmission - Billed		
			LPC001	Late Payment Charge		
			ODL001	Outdoor Lighting		
			TRN004	Transmission Billed		
M	SAC05	610	Amount		O	N2 1/15
			Monetary amount			
			This field stands on its own and will be signed if it is negative. The SAC01 is NOT used to determine the sign in the SAC05.			
M	SAC09	355	Unit or Basis for Measurement Code		X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken			
			K1	Kilowatt Demand		
			K2	Kilovolt Amperes Reactive Demand		
			K3	Kilovolt Amperes Reactive Hour		
			K4	Kilovolt Amperes		
			KH	Kilowatt Hour		
			MO	Months		
M	SAC10	380	Quantity		X	R 1/15
			Numeric value of quantity			
C	SAC13	127	Reference Identification		X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier			
			Used to assign a print sequencing number to determine the order that the line item will appear on the bill. Condition: Required if CRES wants line items printed in a sequence..			
M	SAC15	352	Description		X	AN 1/80
			A free-form description to clarify the related data elements and their content			
			The description field is limited by each billing party. Check with the appropriate billing party to verify the maximum length of this field.			

Segment: **IT1** **Baseline Item Data**
Position: 010
Loop: IT1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Syntax Notes:

- 1 If any of IT102 IT103 or IT104 is present, then all are required.
- 2 If either IT106 or IT107 is present, then the other is required.
- 3 If either IT108 or IT109 is present, then the other is required.
- 4 If either IT110 or IT111 is present, then the other is required.
- 5 If either IT112 or IT113 is present, then the other is required.
- 6 If either IT114 or IT115 is present, then the other is required.
- 7 If either IT116 or IT117 is present, then the other is required.
- 8 If either IT118 or IT119 is present, then the other is required.
- 9 If either IT120 or IT121 is present, then the other is required.
- 10 If either IT122 or IT123 is present, then the other is required.
- 11 If either IT124 or IT125 is present, then the other is required.

Semantic Notes: 1 IT101 is the purchase order line item identification.

Comments:

- 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
- 2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: RATE: Used to convey charges that apply to the Rate Level.
 Required if charges can be summed to the rate level.
 IT1~1~~~~SV~EL~C3~RATE

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	IT101	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set Sequential Line Item Counter	O AN 1/20
M	IT106	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SV Service Rendered	X ID 2/2
M	IT107	234	Product/Service ID Identifying number for a product or service There may be only one commodity (Electric) for each 810 transaction. EL Electric Service	X AN 1/48
M	IT108	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) C3 Classification	X ID 2/2
M	IT109	234	Product/Service ID Identifying number for a product or service RATE Indicates that charges are summarized at a rate level	X AN 1/48

Segment:	DTM Date/Time Reference (Service Period Start)
Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required. 2 If DTM04 is present, then DTM03 is required. 3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	The full service period should match the PTD~SU, PTD~BO, and/or PTD~BC loops from the applicable 867. Required DTM~150~19991224

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

Segment:	DTM Date/Time Reference (Service Period End)
Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required. 2 If DTM04 is present, then DTM03 is required. 3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	The full service period should match the PTD~SU, PTD~BO, and/or PTD~BC loops from the applicable 867. Required DTM~151~20000124

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

Segment:	SLN Subline Item Detail
Position:	200
Loop:	SLN Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify product subline detail item data
Syntax Notes:	<ol style="list-style-type: none"> 1 If either SLN04 or SLN05 is present, then the other is required. 2 If SLN07 is present, then SLN06 is required. 3 If SLN08 is present, then SLN06 is required. 4 If either SLN09 or SLN10 is present, then the other is required. 5 If either SLN11 or SLN12 is present, then the other is required. 6 If either SLN13 or SLN14 is present, then the other is required. 7 If either SLN15 or SLN16 is present, then the other is required. 8 If either SLN17 or SLN18 is present, then the other is required. 9 If either SLN19 or SLN20 is present, then the other is required. 10 If either SLN21 or SLN22 is present, then the other is required. 11 If either SLN23 or SLN24 is present, then the other is required. 12 If either SLN25 or SLN26 is present, then the other is required. 13 If either SLN27 or SLN28 is present, then the other is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 SLN01 is the identifying number for the subline item. 2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials. 3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item. 4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.
Comments:	<ol style="list-style-type: none"> 1 See the Data Element Dictionary for a complete list of IDs. 2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1. 3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes:	<p>The IT1/SLN segment (Position 200) is used to overcome the limitation of 25 IT1/SAC loops (Position 180). Each SLN loop will only contain one SAC. Multiple charges/allowances require multiple SLN loops.</p> <p>Required</p> <p>SLN~1~~A</p>

Data Element Summary

	Ref.	Data	Attributes
	Des.	Element Name	
M	SLN01	350 Assigned Identification	M AN 1/20
		Alphanumeric characters assigned for differentiation within a transaction set	
		Used as a loop counter	
M	SLN03	662 Relationship Code	M ID 1/1
		Code indicating the relationship between entities	
		A Add	

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail

Usage: Optional

Max Use: 25

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
 - 2 If either SAC03 or SAC04 is present, then the other is required.
 - 3 If either SAC06 or SAC07 is present, then the other is required.
 - 4 If either SAC09 or SAC10 is present, then the other is required.
 - 5 If SAC11 is present, then SAC10 is required.
 - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
 - 7 If SAC14 is present, then SAC13 is required.
 - 8 If SAC16 is present, then SAC15 is required.

- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
 - 2 SAC05 is the total amount for the service, promotion, allowance, or charge.
If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
 - 3 SAC08 is the allowance or charge rate per unit.
 - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
 - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
 - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
 - 7 SAC16 is used to identify the language being used in SAC15.

- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
 - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Notes: Each SLN loop will contain only one SAC. Multiple charges/allowances require multiple SLN loops.
Required

SAC*C*D140***4539****KH*1234***1**GENERATION: 1234 KWH AT 3.678¢
PER KWH

SAC*C*D140*EU*GEN001*4539****KH*1234***1**GENERATION: 1234 KWH
AT 3.678¢ PER KWH

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
M	SAC01	248	Allowance or Charge Indicator	M ID 1/1
			Code which indicates an allowance or charge for the service specified	
			C Charge	
M	SAC02	1300	Service, Promotion, Allowance, or Charge Code	X ID 4/4
			Code identifying the service, promotion, allowance, or charge	
			D140 Forwarding Charge	
			Bill Ready - Actual Charges	
C	SAC03	559	Agency Qualifier Code	X ID 2/2
			EU Electric Utilities	
			Conditional – Use of this field will be agreed upon by the EDU and CRES.	

C	SAC04	1301	Energy Charges	X	AN 1/10
			Required – AEP & DP&L Not Used – Duke Energy Ohio & FirstEnergy		
			ADJ002 Adjustment		
			BAS001 Basic Customer Charge		
			BAS002 Special Billing Charge		
			BUD001 Budget Billing Amount		
			BUD002 Budget Billing Settlement		
			DMD001 Demand Charge		
			ENC001 Energy Charge		
			ENC020 Night Charge		
			ENC022 Flat Bill		
			GEN001 Generation Charge		
			GEN002 Generation - Measured		
			GEN003 Generation - Adjusted		
			GEN004 Generation - Billed		
			GTC002 Generation & Transmission		
			GTC004 Generation & Transmission - Billed		
			LPC001 Late Payment Charge		
			ODL001 Outdoor Lighting		
			TRN004 Transmission Billed		
M	SAC05	610	Amount	O	N2 1/15
			Monetary amount		
			This field stands on its own and will be signed if it is negative. The SAC01 is NOT used to determine the sign in the SAC05.		
M	SAC09	355	Unit or Basis for Measurement Code	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			K1 Kilowatt Demand		
			K2 Kilovolt Amperes Reactive Demand		
			K3 Kilovolt Amperes Reactive Hour		
			K4 Kilovolt Amperes		
			KH Kilowatt Hour		
			MO Months		
M	SAC10	380	Quantity	X	R 1/15
			Numeric value of quantity		
O	SAC13	127	Reference Identification	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Used to assign a print sequencing number to determine the order that the line item will appear on the bill.		
M	SAC15	352	Description	X	AN 1/80
			A free-form description to clarify the related data elements and their content		
			The description field is limited by each billing party. Check with the appropriate billing party to verify the maximum length of this field.		

Segment: **IT1** **Baseline Item Data**
Position: 010
Loop: IT1 Optional
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Syntax Notes:

- 1 If any of IT102 IT103 or IT104 is present, then all are required.
- 2 If either IT106 or IT107 is present, then the other is required.
- 3 If either IT108 or IT109 is present, then the other is required.
- 4 If either IT110 or IT111 is present, then the other is required.
- 5 If either IT112 or IT113 is present, then the other is required.
- 6 If either IT114 or IT115 is present, then the other is required.
- 7 If either IT116 or IT117 is present, then the other is required.
- 8 If either IT118 or IT119 is present, then the other is required.
- 9 If either IT120 or IT121 is present, then the other is required.
- 10 If either IT122 or IT123 is present, then the other is required.
- 11 If either IT124 or IT125 is present, then the other is required.

Semantic Notes: 1 IT101 is the purchase order line item identification.

Comments:

- 1 Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
- 2 IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes: UNMET: Used to convey charges that apply to the unmetered services.

Required if there are unmetered services on the account.

IT1~1~~~~SV~EL~C3~UNMET

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	IT101	350	Assigned Identification Alphanumeric characters assigned for differentiation within a transaction set Sequential Line Item Counter	O AN 1/20
M	IT106	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) SV Service Rendered	X ID 2/2
M	IT107	234	Product/Service ID Identifying number for a product or service There may be only one commodity (Electric) for each 810 transaction. EL Electric Service	X AN 1/48
M	IT108	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234) C3 Classification	X ID 2/2
	IT109	234	Product/Service ID Identifying number for a product or service UNMET Indicates that charges are for unmetered services	X AN 1/48

Segment:	DTM Date/Time Reference (Service Period Start)
Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	1 At least one of DTM02 DTM03 or DTM05 is required. 2 If DTM04 is present, then DTM03 is required. 3 If either DTM05 or DTM06 is present, then the other is required.
Semantic Notes:	
Comments:	
Notes:	The full service period should match the PTD~SU, PTD~BO and /or PTD~BD or BC loops, from the applicable 867. Required DTM~150~19991224

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

Segment:	DTM Date/Time Reference (Service Period End)
Position:	150
Loop:	IT1 Optional
Level:	Detail
Usage:	Optional
Max Use:	10
Purpose:	To specify pertinent dates and times
Syntax Notes:	<ol style="list-style-type: none"> 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:	<p>The full service period should match the PTD~SU, PTD~BO, and/or PTD~BC loops from the applicable 867.</p> <p>Required</p> <p>DTM~151~20000124</p>

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

Segment:	SLN Subline Item Detail
Position:	200
Loop:	SLN Optional
Level:	Detail
Usage:	Optional
Max Use:	1
Purpose:	To specify product subline detail item data
Syntax Notes:	<ol style="list-style-type: none"> 1 If either SLN04 or SLN05 is present, then the other is required. 2 If SLN07 is present, then SLN06 is required. 3 If SLN08 is present, then SLN06 is required. 4 If either SLN09 or SLN10 is present, then the other is required. 5 If either SLN11 or SLN12 is present, then the other is required. 6 If either SLN13 or SLN14 is present, then the other is required. 7 If either SLN15 or SLN16 is present, then the other is required. 8 If either SLN17 or SLN18 is present, then the other is required. 9 If either SLN19 or SLN20 is present, then the other is required. 10 If either SLN21 or SLN22 is present, then the other is required. 11 If either SLN23 or SLN24 is present, then the other is required. 12 If either SLN25 or SLN26 is present, then the other is required. 13 If either SLN27 or SLN28 is present, then the other is required.
Semantic Notes:	<ol style="list-style-type: none"> 1 SLN01 is the identifying number for the subline item. 2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials. 3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item. 4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.
Comments:	<ol style="list-style-type: none"> 1 See the Data Element Dictionary for a complete list of IDs. 2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1. 3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.
Notes:	<p>The IT1/SLN segment (Position 200) is used to overcome the limitation of 25 IT1/SAC loops (Position 180). Each SLN loop will only contain one SAC. Multiple charges/allowances require multiple SLN loops.</p> <p>Required</p> <p>SLN~1~~A</p>

Data Element Summary

	Ref.	Data	Attributes
	Des.	Element Name	
M	SLN01	350 Assigned Identification	M AN 1/20
		Alphanumeric characters assigned for differentiation within a transaction set	
		Used as a loop counter	
M	SLN03	662 Relationship Code	M ID 1/1
		Code indicating the relationship between entities	
		A Add	

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail

Usage: Optional

Max Use: 25

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

- Syntax Notes:**
- 1 At least one of SAC02 or SAC03 is required.
 - 2 If either SAC03 or SAC04 is present, then the other is required.
 - 3 If either SAC06 or SAC07 is present, then the other is required.
 - 4 If either SAC09 or SAC10 is present, then the other is required.
 - 5 If SAC11 is present, then SAC10 is required.
 - 6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.
 - 7 If SAC14 is present, then SAC13 is required.
 - 8 If SAC16 is present, then SAC15 is required.

- Semantic Notes:**
- 1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
 - 2 SAC05 is the total amount for the service, promotion, allowance, or charge.
If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
 - 3 SAC08 is the allowance or charge rate per unit.
 - 4 SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
 - 5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
 - 6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
 - 7 SAC16 is used to identify the language being used in SAC15.

- Comments:**
- 1 SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
 - 2 In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

Notes: Each SLN loop will contain only one SAC. Multiple charges/allowances require multiple SLN loops.

Required

SAC~C~D140~~~4539~~~KH~1234~~~1~~GENERATION: 1234 KWH AT 3.678¢ PER KWH

SAC~C~D140~EU~GEN001~4539~~~KH~1234~~~1~~GENERATION: 1234 KWH AT 3.678¢ PER KWH

Data Element Summary

Ref.	Des.	Data Element	Name		Attributes	
M	SAC01	248	Allowance or Charge Indicator		M	ID 1/1
			Code which indicates an allowance or charge for the service specified			
			C	Charge		
M	SAC02	1300	Service, Promotion, Allowance, or Charge Code		X	ID 4/4
			Code identifying the service, promotion, allowance, or charge			
			D140	Forwarding Charge		
				Bill Ready - Actual Charges		
C	SAC03	559	Agency Qualifier Code		X	ID 2/2
			EU	Electric Utilities		
			Conditional – Use of this field will be agreed upon by the EDU and CRES.			

C	SAC04	1301	Energy Charges	X	AN 1/10
			Required – AEP & DP&L		
			Not Used – Duke Energy Ohio & FirstEnergy		
			ADJ002		
			Adjustment		
			BAS001		
			Basic Customer Charge		
			BAS002		
			Special Billing Charge		
			BUD001		
			Budget Billing Amount		
			BUD002		
			Budget Billing Settlement		
			DMD001		
			Demand Charge		
			ENC001		
			Energy Charge		
			ENC020		
			Night Charge		
			ENC022		
			Flat Bill		
			GEN001		
			Generation Charge		
			GEN002		
			Generation - Measured		
			GEN003		
			Generation - Adjusted		
			GEN004		
			Generation - Billed		
			GTC002		
			Generation & Transmission		
			GTC004		
			Generation & Transmission - Billed		
			LPC001		
			Late Payment Charge		
			ODL001		
			Outdoor Lighting		
			TRN004		
			Transmission Billed		
M	SAC05	610	Amount	O	N2 1/15
			Monetary amount		
			This field stands on its own and will be signed if it is negative. The SAC01 is NOT used to determine the sign in the SAC05.		
M	SAC09	355	Unit or Basis for Measurement Code	X	ID 2/2
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken		
			K1		
			Kilowatt Demand		
			K2		
			Kilovolt Amperes Reactive Demand		
			K3		
			Kilovolt Amperes Reactive Hour		
			K4		
			Kilovolt Amperes		
			KH		
			Kilowatt Hour		
			MO		
			Months		
M	SAC10	380	Quantity	X	R 1/15
			Numeric value of quantity		
O	SAC13	127	Reference Identification	X	AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier		
			Used to assign a print sequencing number to determine the order that the line item will appear on the bill. Not used for Rate Ready billing.		
M	SAC15	352	Description	X	AN 1/80
			A free-form description to clarify the related data elements and their content		
			The description field is limited by each billing party. Check with the appropriate billing party to verify the maximum length of this field.		

Segment:	TDS	Total Monetary Value Summary
Position:	010	
Loop:		
Level:	Summary	
Usage:	Mandatory	
Max Use:	1	
Purpose:	To specify the total invoice discounts and amounts	
Syntax Notes:		
Semantic Notes:	<ol style="list-style-type: none"> 1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable). 2 TDS02 indicates the amount upon which the terms discount amount is calculated. 3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount). 4 TDS04 indicates the total amount of terms discount. 	
Comments:	<ol style="list-style-type: none"> 1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01. 	
Notes:	<p>If this amount is negative, send the minus sign.</p> <p>Required - The TDS will be the total charges for the current month, it will not include prior balances or adjustments.</p> <p>TDS~9875 (Represents \$98.75 the decimal is implied)</p>	

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Amount</u>	
M	TDS01	610	M N2 1/15

Monetary amount

Total amount of non-billing party's invoice

If negative, this amount must be preceded by a negative sign. Please note that this is an implied decimal field; do not send the decimal point.

Segment:	CTT Transaction Totals
Position:	070
Loop:	
Level:	Summary
Usage:	Optional
Max Use:	1
Purpose:	To transmit a hash total for a specific element in the transaction set
Syntax Notes:	1 If either CTT03 or CTT04 is present, then the other is required. 2 If either CTT05 or CTT06 is present, then the other is required.
Semantic Notes:	
Comments:	1 This segment is intended to provide hash totals to validate transaction completeness and correctness.
Notes:	Required CTT~5

Data Element Summary				
M	Ref.	Data	Name	Attributes
	Des.	Element		
	CTT01	354	Number of Line Items	M N0 1/6
			Total number of line items in the transaction set	
			The number of IT1 segments.	

Segment: **SE** Transaction Set Trailer
Position: 080
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: Required

SE~35~000000001

Data Element Summary

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

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LDC Invoice Bill Ready electronically filed by Mr. Joseph D Lindsay on behalf of Ohio EDI
Working Group