

# **Hansen Technologies Implementation Guideline**

for

## **Electronic Data Interchange**

TRANSACTION SET

# **810**

# **Customer Invoice**

**Ver/Rel 004010**

**Outbound from Energy Supplier to Customer**

April 28, 2017

## Summary of Changes

- Initial Release.

## Implementation Notes

Payments Must be Made Electronically	<ul style="list-style-type: none"> <li>• Payments for all bills that are sent via EDI must be made electronically. To set up Electronic Funds Transfer (EFT), please contact Brian Stastny – Brian.Stastny@hsntech.com.</li> </ul>
Payments Must be Made using the Customer Account Number (REF*11) or Invoice Number (BIG02)	<ul style="list-style-type: none"> <li>• The Invoice Number on the EDI Invoice, in element BIG02, is made up of the 10-digit Customer Account Number and the Invoice Date. This complete number, or the Customer Account Number, also located in segment REF*11, may be used to remit payment.</li> <li>• The Utility Account Number or Electric Service Identifier, in segment REF*12 or REF*45, may <b>not</b> be used to remit payment.</li> </ul>
Zero Bills	<ul style="list-style-type: none"> <li>• When an account has no current period charges and 0 usage, a bill will not be generated. If there are utility charges or customer charges, a bill will be generated even if usage is 0.</li> </ul>
TDS (Total) Segment	<ul style="list-style-type: none"> <li>• The TDS (Total Segment) will show the amount that you are expected to remit. This amount is taken directly from the billing system and is not calculated from the EDI segments.</li> <li>• When the account has a Prior Balance, and the amount is a debit (i.e., the previous month's bill remains unpaid), the TDS will reflect the Total Amount Due <b>including the prior balance</b>. The prior balance is shown in the BAL*M*J9 segment.  Please ensure that your systems are set up to recognize that the prior balance is included in the TDS, especially in cases when the net due days are greater than the typical bill cycle and therefore recent payments may not yet be reflected on the account.</li> <li>• When the account has a Prior Balance, and after current period charges, the amount remains a credit (i.e., the account has been overpaid or adjustments applied causing the account balance to be negative), the TDS will show the negative amount. No payment is expected for the account for that bill. The balance prior to current period charges is shown in the BAL*M*J9 segment.</li> <li>• When the account has a Prior Balance that is a credit less than the current period charges, the credit will be applied to the total and the TDS will reflect the current amount due (current period charges less the prior credit balance).</li> </ul>
Corrected Bills	<ul style="list-style-type: none"> <li>• In the event of a cancel/rebill situation, a corrected bill will be sent with an indicator in BIG08 of "CO" – Corrected. There may be several of these invoices that occur one period per night. If the reads were overestimated and the original invoices were paid, this will result in a credit on the account. If the reads were underestimated, the corrected bill will show the amount due.</li> <li>• The credit for the original bill will appear along with the payments in the BAL*P*TP segment.</li> </ul>
Total Payments and Credits (BAL*P*TP) Segment	<ul style="list-style-type: none"> <li>• Please note that the BAL*P*TP contains all credits to the account, including payments and any adjustments that result from the utility cancelling and rebilling the account.</li> </ul>
997 Functional Acknowledgements	<ul style="list-style-type: none"> <li>• 997 Functional Acknowledgments are required.</li> </ul>

# 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.

## Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BIG	Beginning Segment for Invoice	M	1		
	030	NTE	Note/Special Instruction	O	100		
	050	REF	Reference Identification	O	12		
			LOOP ID - N1			200	
	070	N1	Name	O	1		
	080	N2	Additional Name Information	O	2		
	090	N3	Address Information	O	2		
	100	N4	Geographic Location	O	1		
	110	REF	Reference Identification	O	12		
	120	PER	Administrative Communications Contact	O	3		
	130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1		
	212	BAL	Balance Detail	O	>1		

## Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - IT1			200000	
	010	IT1	Baseline Item Data (Invoice)	O	1		
	040	TXI	Tax Information	O	10		
	059	MEA	Measurements	O	40		
	120	REF	Reference Identification	O	>1		
	150	DTM	Date/Time Reference	O	10		
			LOOP ID - SLN			1000	
	200	SLN	Subline Item Detail	O	1		
	230	SAC	Service, Promotion, Allowance, or Charge Information	O	25		

## Summary:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	TDS	Total Monetary Value Summary	M	1		
	070	CTT	Transaction Totals	O	1		n1
M	080	SE	Transaction Set Trailer	M	1		

## 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.

<b>Segment:</b>	<b>ST</b> Transaction Set Header
<b>Position:</b>	010
<b>Loop:</b>	
<b>Level:</b>	Heading
<b>Usage:</b>	Mandatory
<b>Max Use:</b>	1
<b>Purpose:</b>	To indicate the start of a transaction set and to assign a control number
<b>Syntax Notes:</b>	
<b>Semantic Notes:</b>	<b>1</b> The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
<b>Comments:</b>	
<b>Notes:</b>	Required ST~810~102001

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	ST01	143	Transaction Set Identifier Code	M ID 3/3
			Code uniquely identifying a Transaction Set	
			810 Invoice	
Must Use	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~20070630~004300450020070630~~~~~PR~00

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Attributes</b>
	<b><u>Des.</u></b>	<b><u>Element</u> <u>Name</u></b>	
<b>Must Use</b>	<b>BIG01</b>	<b>373 Date</b>	<b>M DT 8/8</b>
		Date expressed as CCYYMMDD	
		Invoice Date	
<b>Must Use</b>	<b>BIG02</b>	<b>76 Invoice Number</b>	<b>M AN 1/22</b>
		Identifying number assigned by issuer	
		This will be a concatenation of the customer account number and the invoice date to create a unique number. This complete number, or simply the customer account number, may be returned on the payment.	
<b>Must Use</b>	<b>BIG07</b>	<b>640 Transaction Type Code</b>	<b>M ID 2/2</b>
		Code specifying the type of transaction	
		FB Final Bill	
		PR Product (or Service)	
<b>Must Use</b>	<b>BIG08</b>	<b>353 Transaction Set Purpose Code</b>	<b>M ID 2/2</b>
		Code identifying purpose of transaction set	
		00 Original	
		CO Corrected	

**Segment:** **NTE** Note/Special Instruction  
**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:** Optional

NTE~ADD~ADDITIONAL INFORMATION PROVIDED HERE

#### Data Element Summary

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

**Segment:** **REF** **Reference Identification (Customer 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:** Required  
REF~11~0043004500

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			11 Account Number	
			Customer Account Number	
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	
			Customer Account Number - This number, or the complete invoice number in BIG02, may be returned on the payment.	



<b>Segment:</b>	<b>REF</b>	<b>Reference Identification (Utility Account Number or ESI ID)</b>
<b>Position:</b>	050	
<b>Loop:</b>		
<b>Level:</b>	Heading	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	12	
<b>Purpose:</b>	To specify identifying information	
<b>Syntax Notes:</b>	1	At least one of REF02 or REF03 is required.
	2	If either C04003 or C04004 is present, then the other is required.
	3	If either C04005 or C04006 is present, then the other is required.
<b>Semantic Notes:</b>	1	REF04 contains data relating to the value cited in REF02.
<b>Comments:</b>		
<b>Notes:</b>	Required - Either a Utility Account Number or an Electric Service Identifier will be used depending on the competitive market. At this time only the Texas market uses the ESI ID.	
	REF~12~0043004500	
	REF~Q5~~104400511944458280001	

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b>	M ID 2/3
			Code qualifying the Reference Identification	
		12	Billing Account	
			Utility Account Number or Electric Service Identifier (ESI ID)	
		Q5	Property Control Number	
			Electric Service Identifier (ESI ID)	
Dep	REF02	127	<b>Reference Identification</b>	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			Required if market uses a Utility Account Number for the customer, otherwise not used.	
Dep	REF03	352	<b>Description</b>	X AN 1/80
			A free-form description to clarify the related data elements and their content	
			Required if market uses an Electric Service Identifier (ESI ID) for the customer, otherwise not used. The ESI ID may be up to 36 characters.	

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

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
<b>Must Use</b>	<b>N101</b>	<b>98</b>	<b>Entity Identifier Code</b>	<b>M ID 2/3</b>
			Code identifying an organizational entity, a physical location, property or an individual	
			BT Bill-to-Party	
<b>Must Use</b>	<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/60</b>
			Free-form name	
			Billing Name	

**Segment:** **N2** Additional Name Information (Billing Name)  
**Position:** 080  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify additional names or those longer than 35 characters in length  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:** Optional  
 N2~BILLING NAME CARRYOVER

Data Element Summary			
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u> <u>Attributes</u>
Must Use	N201	93	Name M AN 1/60
			Free-form name
			Billing Name Carryover

**Segment:** N3 Address Information (Billing Address)  
**Position:** 090  
**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:**

Required  
N3~1234 MAIN STREET~PO BOX 1001

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information Address information	M AN 1/55
	N302	166	Address Information Address information	O AN 1/55

<b>Segment:</b>	<b>N4 Geographic Location (Billing Address)</b>
<b>Position:</b>	100
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<p>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</p> <p>2 N402 is required only if city name (N401) is in the U.S. or Canada.</p>
<b>Notes:</b>	Required
	N4~ANYTOWN~TX~75111

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
Must Use	N401	19	City Name	O AN 2/30
			Free-form text for city name	
Must Use	N402	156	State or Province Code	O ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
Must Use	N403	116	Postal Code	O ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	

<b>Segment:</b>	<b>N1</b> Name (Remittance Name)
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Required
	N1~RE~REMITTANCE NAME~9~879711161RMTO

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
<b>Must Use</b>	<b>N101</b>	<b>98</b>	<b>Entity Identifier Code</b>	<b>M ID 2/3</b>
			Code identifying an organizational entity, a physical location, property or an individual	
			RE Party to receive commercial invoice remittance	
<b>Must Use</b>	<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/60</b>
			Free-form name	
			Remittance Name	
<b>Must Use</b>	<b>N103</b>	<b>66</b>	<b>Identification Code Qualifier</b>	<b>X ID 1/2</b>
			Code designating the system/method of code structure used for Identification Code (67)	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
<b>Must Use</b>	<b>N104</b>	<b>67</b>	<b>Identification Code</b>	<b>X AN 2/80</b>
			Code identifying a party or other code	
			DUNS+4 of the Party to Receive Remittance	

**Segment:** N3 Address Information (Remittance Address)  
**Position:** 090  
**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:** Required  
N3~PO BOX 1111

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
	N302	166	Address Information	O AN 1/55
			Address information	

<b>Segment:</b>	<b>N4 Geographic Location (Remittance Address)</b>
<b>Position:</b>	100
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<p>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</p> <p>2 N402 is required only if city name (N401) is in the U.S. or Canada.</p>
<b>Notes:</b>	Required
	N4~ANYTOWN~PA~18102-1111

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
Must Use	N401	19	City Name	O AN 2/30
			Free-form text for city name	
Must Use	N402	156	State or Province Code	O ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
Must Use	N403	116	Postal Code	O ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	



**Segment:** **REF** **Reference Identification (Federal Tax ID)**  
**Position:** 110  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:**

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

**Semantic Notes:**

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

**Comments:**  
**Notes:** Optional  
REF~TJ~95-4114811

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			TJ Federal Taxpayer's Identification Number	
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	
			Federal Tax ID	

<b>Segment:</b>	<b>N1</b> Name (Energy Supplier Name)
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Required
	N1~SJ~ENERGY SUPPLIER~9~879711161ESP1

Data Element Summary				
	<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			SJ Service Provider	
			Energy Supplier	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Energy Supplier Name	
Must Use	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	
Must Use	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			DUNS+4 of the Energy Supplier	

**Segment:** **N3** Address Information (Energy Supplier Address)  
**Position:** 090  
**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:** Required  
N3~PO BOX 9999

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
	N302	166	Address Information	O AN 1/55
			Address information	

<b>Segment:</b>	<b>N4 Geographic Location (Energy Supplier Address)</b>
<b>Position:</b>	100
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<p>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</p> <p>2 N402 is required only if city name (N401) is in the U.S. or Canada.</p>
<b>Notes:</b>	Required
	N4~ANYTOWN~ME~04360-9999

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
Must Use	N401	19	City Name	O AN 2/30
			Free-form text for city name	
Must Use	N402	156	State or Province Code	O ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
Must Use	N403	116	Postal Code	O ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	

<b>Segment:</b>	<b>PER</b> Administrative Communications Contact (Energy Supplier)
<b>Position:</b>	120
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	3
<b>Purpose:</b>	To identify a person or office to whom administrative communications should be directed
<b>Syntax Notes:</b>	<b>1</b> If either PER03 or PER04 is present, then the other is required. <b>2</b> If either PER05 or PER06 is present, then the other is required. <b>3</b> If either PER07 or PER08 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Optional PER~IC~CUSTOMER SERVICE~TE~1-888-555-9000~EM~www.company.com

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

<b>Segment:</b>	<b>N1</b> Name (Utility Name)
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Required N1~8S~UTILITY DISTRIBUTION CO~1~007909111

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

**Segment:** **N3** Address Information (Utility Address)  
**Position:** 090  
**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:** Optional  
 N3~101 UTILITY DRIVE

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
	N302	166	Address Information	O AN 1/55
			Address information	

**Segment:** **N4 Geographic Location (Utility Address)**  
**Position:** 100  
**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:** Optional  
N4~ANYTOWN~TX~78999

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name	O AN 2/30
		Free-form text for city name	
N402	156	State or Province Code	O ID 2/2
		Code (Standard State/Province) as defined by appropriate government agency	
N403	116	Postal Code	O ID 3/15
		Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	



<b>Segment:</b>	<b>PER</b> Administrative Communications Contact (Utility)
<b>Position:</b>	120
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	3
<b>Purpose:</b>	To identify a person or office to whom administrative communications should be directed
<b>Syntax Notes:</b>	<b>1</b> If either PER03 or PER04 is present, then the other is required. <b>2</b> If either PER05 or PER06 is present, then the other is required. <b>3</b> If either PER07 or PER08 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Optional PER~IC~CUSTOMER SERVICE~TE~1-888-555-9000~EM~www.company.com

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

<b>Segment:</b>	<b>N1</b> Name (Service Address)
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To identify a party by type of organization, name, and code
<b>Syntax Notes:</b>	<b>1</b> At least one of N102 or N103 is required. <b>2</b> If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<b>1</b> This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. <b>2</b> N105 and N106 further define the type of entity in N101.
<b>Notes:</b>	Required N1~MQ~SERVICE ADDRESS NAME N1~MQ~SERVICE ADDRESS NAME~92~STORE 101

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			MQ Metering Location	
			Service Address	
Must Use	N102	93	Name	X AN 1/60
			Free-form name	
			Service Address Name	
	N103	66	Identification Code Qualifier	X ID 1/2
			Code designating the system/method of code structure used for Identification Code (67)	
		92	Assigned by Buyer or Buyer's Agent	
	N104	67	Identification Code	X AN 2/80
			Code identifying a party or other code	
			Customer Reference Number (e.g., store number)	

**Segment:** **N2** Additional Name Information  
**Position:** 080  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 2  
**Purpose:** To specify additional names or those longer than 35 characters in length  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:** Optional  
 N2~SERVICE ADDRESS NAME CARRYOVER

Data Element Summary			
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u> <u>Attributes</u>
Must Use	N201	93	Name Free-form name Service Address Name Carryover

**Segment:** **N3** Address Information (Service Address)  
**Position:** 090  
**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:** Required  
 N3~1234 MAIN STREET~STE 101

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	N301	166	Address Information	M AN 1/55
			Address information	
	N302	166	Address Information	O AN 1/55
			Address information	

<b>Segment:</b>	<b>N4 Geographic Location (Service Address)</b>
<b>Position:</b>	100
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify the geographic place of the named party
<b>Syntax Notes:</b>	1 If N406 is present, then N405 is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	<p>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</p> <p>2 N402 is required only if city name (N401) is in the U.S. or Canada.</p>
<b>Notes:</b>	Required
	N4~ANYTOWN~TX~75111

Data Element Summary				
	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
Must Use	N401	19	City Name	O AN 2/30
			Free-form text for city name	
Must Use	N402	156	State or Province Code	O ID 2/2
			Code (Standard State/Province) as defined by appropriate government agency	
Must Use	N403	116	Postal Code	O ID 3/15
			Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	

<b>Segment:</b>	<b>ITD</b>	<b>Terms of Sale/Deferred Terms of Sale</b>
<b>Position:</b>	130	
<b>Loop:</b>		
<b>Level:</b>	Heading	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	>1	
<b>Purpose:</b>	To specify terms of sale	
<b>Syntax Notes:</b>	<b>1</b>	If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.
	<b>2</b>	If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.
	<b>3</b>	If ITD09 is present, then at least one of ITD10 or ITD11 is required.
<b>Semantic Notes:</b>	<b>1</b>	ITD15 is the percentage applied to a base amount used to determine a late payment charge.
<b>Comments:</b>	<b>1</b>	If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.
<b>Notes:</b>	Required	
	ITD~~~~~20070719	

Data Element Summary				
	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<b>Must Use</b>	<b>ITD06</b>	<b>446</b>	<b>Terms Net Due Date</b>	<b>O DT 8/8</b>
			Date when total invoice amount becomes due expressed in format CCYYMMDD	
			Invoice Due Date	

**Segment:** **BAL** Balance Detail (Total Amount of Previous Bill)  
**Position:** 212  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To identify the specific monetary balances associated with a particular account  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:** Required if balance is not zero.  
BAL~P~YB~150.00

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BAL01	951	Balance Type Code	M ID 1/2
			Code indicating the type of balance	
			P Previous Month	
Must Use	BAL02	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			YB Actual Unpaid Principal Balance	
Must Use	BAL03	782	Monetary Amount	M R 1/18
			Monetary amount	
			Total Amount of Previous Bill	

<b>Segment:</b>	<b>BAL</b> Balance Detail (Total Payments/Credits Received Since Last Bill)
<b>Position:</b>	212
<b>Loop:</b>	
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	>1
<b>Purpose:</b>	To identify the specific monetary balances associated with a particular account
<b>Syntax Notes:</b>	
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	<p>Required if balance is not zero.</p> <p>Note that this segment will include credits to the account that may have been transferred from other accounts along with the credit for an original bill when the bill is corrected.</p> <p>BAL~P~TP~150.00</p>

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BAL01	951	Balance Type Code	M ID 1/2
			Code indicating the type of balance	
			P Previous Month	
Must Use	BAL02	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			TP Total payment amount	
Must Use	BAL03	782	Monetary Amount	M R 1/18
			Monetary amount	
			Total Payments/Credits Received Since Last Bill	



<b>Segment:</b>	<b>BAL</b>	<b>Balance Detail (Outstanding Balance Prior to Current Period Charges)</b>
<b>Position:</b>	212	
<b>Loop:</b>		
<b>Level:</b>	Heading	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	>1	
<b>Purpose:</b>	To identify the specific monetary balances associated with a particular account	
<b>Syntax Notes:</b>		
<b>Semantic Notes:</b>		
<b>Comments:</b>		
<b>Notes:</b>	Required if balance is not zero. BAL~M~J9~100.00	

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	BAL01	951	Balance Type Code	M ID 1/2
			Code indicating the type of balance	
			M Current Month	
Must Use	BAL02	522	Amount Qualifier Code	M ID 1/3
			Code to qualify amount	
			J9 Beginning Balance	
Must Use	BAL03	782	Monetary Amount	M R 1/18
			Monetary amount	
			Outstanding Balance Prior to Current Period Charges	

**Segment:** **IT1** **Baseline Item Data (Meter Level)**  
**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:** Required

IT1~1~~~~SV~ELECTRIC~C3~METER~MB~TOU

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	IT101	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	<b>O AN 1/20</b>
Must Use	IT106	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) SV Service Rendered	<b>X ID 2/2</b>
Must Use	IT107	234	<b>Product/Service ID</b> Identifying number for a product or service ELECTRIC	<b>X AN 1/48</b>
Must Use	IT108	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) C3 Classification	<b>X ID 2/2</b>
Must Use	IT109	234	<b>Product/Service ID</b> Identifying number for a product or service METER Meter level information	<b>X AN 1/48</b>
	IT110	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) MB Measurement Type Code	<b>X ID 2/2</b>
	IT111	234	<b>Product/Service ID</b> Identifying number for a product or service NT Non-Time Of Use Measurement TOU Time Of Use Measurement	<b>X AN 1/48</b>

<b>Segment:</b>	<b>MEA</b>	<b>Measurements (Consumption)</b>
<b>Position:</b>	059	
<b>Loop:</b>	IT1	Optional
<b>Level:</b>	Detail	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	40	
<b>Purpose:</b>	To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of C001)	
<b>Syntax Notes:</b>	<b>1</b> At least one of MEA03 MEA05 MEA06 or MEA08 is required. <b>2</b> If MEA05 is present, then MEA04 is required. <b>3</b> If MEA06 is present, then MEA04 is required. <b>4</b> If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required. <b>5</b> Only one of MEA08 or MEA03 may be present.	
<b>Semantic Notes:</b>	<b>1</b> MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.	
<b>Comments:</b>	<b>1</b> When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.	
<b>Notes:</b>	Optional - Not all competitive markets provide this information to the Energy Supplier. Default value for MEA01 when meter reads are not provided will be "AA". MEA~AA~PRQ~400~KH~12250~12450~51\ (Example uses meter multiplier of 2) MEA~AA~PRQ~14~K1~~14~51\ (Example uses meter multiplier of 1)	

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	MEA01	737	<b>Measurement Reference ID Code</b>	<b>O ID 2/2</b>
			Code identifying the broad category to which a measurement applies	
			AA Meter reading-beginning actual/ending actual	
			AE Meter reading-beginning actual/ending estimated	
			BO Meter Reading as Billed	
			EA Meter reading-beginning estimated/ending actual	
			EE Meter reading-beginning estimated/ending estimated	
Must Use	MEA02	738	<b>Measurement Qualifier</b>	<b>O ID 1/3</b>
			Code identifying a specific product or process characteristic to which a measurement applies	
			PRQ Product Reportable Quantity	
			Regular Usage	
Must Use	MEA03	739	<b>Measurement Value</b>	<b>X R 1/20</b>
			The value of the measurement	
			Represents quantity of consumption delivered for service period. Contains the difference in the meter readings (or as measured by the meter) multiplied by various factors (demand/consumption x meter multiplier), excluding Power Factor.	
Must Use	MEA04	C001	<b>Composite Unit of Measure</b>	<b>X</b>
			To identify a composite unit of measure (See Figures Appendix for examples of use)	
Must Use	C00101	355	<b>Unit or Basis for Measurement Code</b>	<b>M ID 2/2</b>
			Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
			New codes may be added as the competitive markets develop.	
			K1 Kilowatt Demand (kW)	
			K2 Kilovolt Amperes Reactive Demand (kVAR)	
			K3 Kilovolt Amperes Reactive Hour (kVARh)	
			K4 Kilovolt Amperes (kVa)	
			KH Kilowatt Hour (kWh)	
	MEA05	740	<b>Range Minimum</b>	<b>X R 1/20</b>

		The value specifying the minimum of the measurement range	
		Beginning Reading	
MEA06	741	Range Maximum	X R 1/20
		The value specifying the maximum of the measurement range	
		Ending Reading or Single Reading (i.e., Demand)	
MEA07	935	Measurement Significance Code	O ID 2/2
		Code used to benchmark, qualify or further define a measurement value	
		The code descriptions in this data element have been modified by the Utility Industry. New codes may be added as the competitive markets develop.	
		41	Off Peak
		42	On Peak
		43	Intermediate (Mid) Peak
		45	Summer On Peak
		49	Winter On Peak
		50	Winter Mid Peak
		51	Total
		57	Summer
		58	Winter
		62	Current
		66	Shoulder Peak
		71	Summer Super On Peak
		73	Summer Off Peak
		74	Summer Mid Peak
		75	Winter Off Peak
		84	High Tension On Peak Energy
		85	High Tension Off Peak Energy
		86	Low Tension On Peak Energy
		87	Low Tension Off Peak Energy
		88	Low Tension Total Energy
		92	High Tension Total Energy

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

**Position:** 059

**Loop:** IT1 Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

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

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

2 If MEA05 is present, then MEA04 is required.

3 If MEA06 is present, then MEA04 is required.

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

5 Only one of MEA08 or MEA03 may be present.

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

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

**Notes:** Optional - Not all competitive markets provide this information to the Energy Supplier.  
MEA~~MU~1

#### Data Element Summary

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
Must Use	MEA02	738	Measurement Qualifier	O ID 1/3
			Code identifying a specific product or process characteristic to which a measurement applies	
			MU Multiplier	
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
			Meter Constant	

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

**Position:** 059

**Loop:** IT1 Optional

**Level:** Detail

**Usage:** Optional

**Max Use:** 40

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

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

**2** If MEA05 is present, then MEA04 is required.

**3** If MEA06 is present, then MEA04 is required.

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

**5** Only one of MEA08 or MEA03 may be present.

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

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

**Notes:** Optional - Not all competitive markets provide this information to the Energy Supplier.  
MEA~~ZA~.863

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
	<b>Des.</b>	<b>Element</b>		
<b>Must Use</b>	<b>MEA02</b>	<b>738</b>	<b>Measurement Qualifier</b>	<b>O ID 1/3</b>
			Code identifying a specific product or process characteristic to which a measurement applies	
			ZA Power Factor	
<b>Must Use</b>	<b>MEA03</b>	<b>739</b>	<b>Measurement Value</b>	<b>X R 1/20</b>
			The value of the measurement	
			Power Factor	

<b>Segment:</b>	<b>REF</b>	<b>Reference Identification (Meter Number)</b>
<b>Position:</b>	120	
<b>Loop:</b>	IT1	Optional
<b>Level:</b>	Detail	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	>1	
<b>Purpose:</b>	To specify identifying information	
<b>Syntax Notes:</b>	<b>1</b> At least one of REF02 or REF03 is required. <b>2</b> If either C04003 or C04004 is present, then the other is required. <b>3</b> If either C04005 or C04006 is present, then the other is required.	
<b>Semantic Notes:</b>	<b>1</b> REF04 contains data relating to the value cited in REF02.	
<b>Comments:</b>		
<b>Notes:</b>	Optional - Not all competitive markets provide this information to the Energy Supplier. A default meter number may be used (e.g., CTPMETER001). REF~MG~GE79602422	

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	Reference Identification Qualifier	M ID 2/3
			Code qualifying the Reference Identification	
			MG	Meter Number
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	
			Meter Number	

**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:** Required  
DTM~150~20070617

Data Element Summary				
	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	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	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Service Period Start Date	



**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:** Required  
DTM~151~20070718

Data Element Summary				
	Ref. Des.	Data Element	Name	Attributes
Must Use	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	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Service Period End Date	

**Segment:** **IT1** **Baseline Item Data (Account Level)**  
**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:** Required

IT1~1~~~~~SV~ELECTRIC~C3~ACCOUNT

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	IT101	350	<b>Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	<b>O AN 1/20</b>
Must Use	IT106	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) SV Service Rendered	<b>X ID 2/2</b>
Must Use	IT107	234	<b>Product/Service ID</b> Identifying number for a product or service ELECTRIC	<b>X AN 1/48</b>
Must Use	IT108	235	<b>Product/Service ID Qualifier</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) C3 Classification	<b>X ID 2/2</b>
Must Use	IT109	234	<b>Product/Service ID</b> Identifying number for a product or service ACCOUNT Account level information and charges	<b>X AN 1/48</b>

**Segment:** **TXI** Tax Information  
**Position:** 040  
**Loop:** IT1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify tax information  
**Syntax Notes:**

- 1 At least one of TXI02 TXI03 or TXI06 is required.
- 2 If either TXI04 or TXI05 is present, then the other is required.
- 3 If TXI08 is present, then TXI03 is required.

**Semantic Notes:**

- 1 TXI02 is the monetary amount of the tax.
- 2 TXI03 is the tax percent expressed as a decimal.
- 3 TXI07 is a code indicating the relationship of the price or amount to the associated segment.

**Comments:**

**Notes:**

Optional

TXI~ST~6.00~~~~~A

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Must Use</b>	<b>Des.</b>	<b>Element</b>	<b>Tax Type Code</b>	<b>M ID 2/2</b>
	<b>TXI01</b>	<b>963</b>	Code specifying the type of tax New codes may be added as markets continue to develop.	
			AT Assessment PUC Assessment Reimbursement	
			CS City Sales Tax	
			CT County Tax	
			FR Franchise Tax Franchise Fee	
			GR Gross Receipts Tax	
			LS State and Local Sales Tax	
			LT Local Sales Tax (All Applicable Sales Taxes by Taxing Authority Below the State Level)	
			MP Municipal Tax	
			SE State Excise Tax Excise Tax Reimbursement	
			ST State Sales Tax	
			SU Sales and Use Tax	
			UT Utility Users' Tax	
<b>Must Use</b>	<b>TXI02</b>	<b>782</b>	<b>Monetary Amount</b> Monetary amount Tax Amount	<b>X R 1/18</b>
<b>Must Use</b>	<b>TXI07</b>	<b>662</b>	<b>Relationship Code</b> Code indicating the relationship between entities A Add The amount in the TXI02 will be added when summing the invoice total. O Information Only The amount in the TXI02 will not be added when summing the invoice total.	<b>O ID 1/1</b>

**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:** Required  
DTM~150~20070617

Data Element Summary				
	Ref. Des.	Data Element	Name	Attributes
Must Use	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	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Service Period Start Date	

**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:** Required  
DTM~151~20070718

Data Element Summary				
	Ref. Des.	Data Element	Name	Attributes
Must Use	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	
Must Use	DTM02	373	Date	X DT 8/8
			Date expressed as CCYYMMDD	
			Service Period End Date	

<b>Segment:</b>	<b>SLN</b> Subline Item Detail
<b>Position:</b>	200
<b>Loop:</b>	SLN Optional
<b>Level:</b>	Detail
<b>Usage:</b>	Optional
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify product subline detail item data
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 If either SLN04 or SLN05 is present, then the other is required.</li> <li>2 If SLN07 is present, then SLN06 is required.</li> <li>3 If SLN08 is present, then SLN06 is required.</li> <li>4 If either SLN09 or SLN10 is present, then the other is required.</li> <li>5 If either SLN11 or SLN12 is present, then the other is required.</li> <li>6 If either SLN13 or SLN14 is present, then the other is required.</li> <li>7 If either SLN15 or SLN16 is present, then the other is required.</li> <li>8 If either SLN17 or SLN18 is present, then the other is required.</li> <li>9 If either SLN19 or SLN20 is present, then the other is required.</li> <li>10 If either SLN21 or SLN22 is present, then the other is required.</li> <li>11 If either SLN23 or SLN24 is present, then the other is required.</li> <li>12 If either SLN25 or SLN26 is present, then the other is required.</li> <li>13 If either SLN27 or SLN28 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 SLN01 is the identifying number for the subline item.</li> <li>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.</li> <li>3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.</li> <li>4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.</li> </ol>
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 See the Data Element Dictionary for a complete list of IDs.</li> <li>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.</li> <li>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.</li> </ol>
<b>Notes:</b>	Required SLN~1~~A

#### Data Element Summary

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

**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:** Required  
SAC~A~~EU~GEN001~2688~~~.05375~KH~500~~~~~ENERGY 500 kWh at  
\$0.05375 per kWh

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	SAC01	248	<b>Allowance or Charge Indicator</b> Code which indicates an allowance or charge for the service specified A Allowance C Charge N No Allowance or Charge	M ID 1/1
	SAC03	559	<b>Agency Qualifier Code</b> Code identifying the agency assigning the code values EU Electric Utilities	X ID 2/2
	SAC04	1301	<b>Agency Service, Promotion, Allowance, or Charge Code</b> Agency maintained code identifying the service, promotion, allowance, or charge New codes will be added to this list continually as each competitive market creates new charge types. Please see Appendix A for current list of codes.	X AN 1/10
Must Use	SAC05	610	<b>Amount</b> Monetary amount	O N2 1/15

<b>SAC08</b>	<b>118</b>	<b>Rate</b>	<b>O R 1/9</b>
		Rate expressed in the standard monetary denomination for the currency specified	
<b>SAC09</b>	<b>355</b>	<b>Unit or Basis for Measurement Code</b>	<b>X ID 2/2</b>
		Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	
		Some of the code descriptions in this data element have been modified by the Utility Industry. New codes may be added as the competitive markets develop.	
		4A	4CP - Kilowatt Demand
			4-Coincident Peak (4CP) - Kilowatt Demand
		4B	4CP - kVA Demand
			4-Coincident Peak (4CP) - kVA Demand
		4C	4CP - Power Factor Adjusted
			4-Coincident Peak (4CP) - Power Factor Applied
		4D	4CP - KVAR Demand
			4-Coincident Peak (4CP) - KVAR Demand
		AF	Actual Demand - Power Factor Adjusted
		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
		KH	Kilowatt Hour (kWh)
		MO	Months
		NA	NCP - Kilowatt Demand
			Non-coincident Peak - Kilowatt Demand
		NB	NCP - kVA Demand
			Non-coincident Peak - kVA Demand
		NC	NCP - Power Factor Adjusted
			Non-coincident Peak - Power Factor Adjusted
		ND	NCP - KVAR Demand
			Non-coincident Peak - KVAR Demand
		RA	Ratchet - Kilowatt Demand
			Ratchet - Kilowatt Demand
		RB	Ratchet - kVA Demand
			Ratchet - kVA Demand
		RC	Ratchet - Power Factor Adjusted
			Ratchet - Power Factor Adjusted
		RD	Ratchet - KVAR Demand
			Ratchet - KVAR Demand
<b>SAC10</b>	<b>380</b>	<b>Quantity</b>	<b>X R 1/15</b>
		Numeric value of quantity	
<b>SAC15</b>	<b>352</b>	<b>Description</b>	<b>X AN 1/80</b>
		A free-form description to clarify the related data elements and their content	



<b>Segment:</b>	<b>TDS</b>	<b>Total Monetary Value Summary</b>
<b>Position:</b>	010	
<b>Loop:</b>		
<b>Level:</b>	Summary	
<b>Usage:</b>	Mandatory	
<b>Max Use:</b>	1	
<b>Purpose:</b>	To specify the total invoice discounts and amounts	
<b>Syntax Notes:</b>		
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).</li> <li>2 TDS02 indicates the amount upon which the terms discount amount is calculated.</li> <li>3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).</li> <li>4 TDS04 indicates the total amount of terms discount.</li> </ol>	
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.</li> </ol>	
<b>Notes:</b>	Required TDS~184.26	

Data Element Summary				
	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	TDS01	610	Amount	M N2 1/15
			Monetary amount	
			TDS01 is the total amount due for this invoice including any prior balance owed at the time of billing. The amount equals the sum of the amounts in the BAL~M~J9, TXI02 and SAC05 elements. If the account has a credit balance, and therefore no payment is expected, this amount will show the credit on the account.	

**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~2

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	CTT01	354	Number of Line Items	M N0 1/6
			Total number of line items in the transaction set	

**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~25~102001

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	SE01	96	Number of Included Segments	M N0 1/10
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	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	

## Appendix A – Charge Codes

ADJ000	Adjustment - See SAC15 for Description
ADJ001	Environmental Cost Recovery Adj
ADJ002	Adjustment
ADJ006	Franchise Fee Adjustment
ADJ007	Meter Correction
ASC001	Ancillary Services Charge
ASC002	Non-Market Based Ancillary Services Charge
ASC003	Real Time Operating Reserve
BAS000	Customer Charge - See SAC15 for Description
BAS001	Customer Charge
BAS003	Metering Charge
BAS004	Field Service Charge
BUD001	Current Budget Charge
BUD002	Levelized Settlement Amount
BUD901	Deferred Amount
BUD902	After this payment your levelized plan is behind
BUD903	After this payment your levelized plan is ahead
BUD904	After this payment your levelized plan is zero
BUD905	Will be your new levelized amount
BUD906	Levelized summary after
BUD907	Including this bill, amount you used
CAP901	Capacity Charge
CAP902	Unforced Capacity Charge - UCAP
COL001	Collection Expense
CON001	Congestion
CRE000	Credit - See SAC15 for Description
CRE001	Excess Credit
CRE004	Credit for customer transformer
CRE005	Generation Credit
CRE009	Credit Interrupt Service
CRE011	Commitment Adjustment
CRE014	Retail Access Credit
CRE020	Meter Owner Credit
CRE027	System Performance Credit
CRE028	Circuit Performance Credit
CRE029	Connect Service Performance Credit
CRE030	Util Serv Discre-UCS Credit
DAB001	Deposit
DAB002	Deposit Interest
DAB003	Deposit Refund
DCS001	Standard Move-In
DCS002	Priority Move-In
DCS003	Move-Out
DCS004	Customer Requested Clearance
DCS005	Disconnect for Non-Pay
DCS006	Standard Reconnect

DCS007 Meter Test  
 DCS008 Re-Read  
 DCS009 Off Cycle Meter Read for Switch  
 DCS010 Off-site Meter Reading Equip Install  
 DCS011 Automated Meter Reading Install  
 DCS012 Interval Data Recorder Install  
 DCS013 Service Call  
 DCS014 Security Lighting Repair  
 DCS015 Security Light Removal  
 DCS016 Street Light Removal  
 DCS017 Tampering  
 DCS018 Broken Meter Seal  
 DCS019 Inaccessible Meter Charge  
 DIS000 Distribution Facilities Charge - See SAC15 for Description  
 DIS001 Distribution System Charge  
 DMD000 Interruptible Demand - See SAC15 for Description  
 DMD001 Distribution Facilities Chg MKD  
 DMD002 Coincident Demand Charge  
 DMD007 On Peak Demand  
 DSC000 Special Reduction Amount - See SAC15 for Description  
 DSC001 Transition Charge-Off Allowance  
 DSC002 Transition Charge-Off Allowance 2  
 DSC009 Energy Assistance Discount  
 ENC000 Energy Charge – See SAC15 for Description  
 ENC001 Energy  
 ENC002 Energy Tier Charge  
 ENC003 Energy Off Peak  
 ENC021 Commodity Charge  
 ENC039 Energy On Peak  
 ENC040 Block  
 ENC042 Energy Charge - Shoulder  
 ENC901 Energy Adj  
 ENC902 Energy Billing KW  
 ENC903 LMP Energy  
 ENC904 Energy Weekend  
 ENC905 Index Energy Charge  
 ENC906 Index Adjustment  
 ENC907 Adder Charge  
 ENC908 Operating Reserve Charge  
 ENC909 Day Ahead Block Allocation  
 ENC910 Heat Rate – Electricity Charge  
 ENC911 HEFA Aggregate Swing  
 ENC912 Retail Access Credit  
 ENC913 Retail Access Credit Discount  
 ENC914 Retail Access Credit Total  
 ENC915 Retail Access Credit Saved  
 FAC000 Lighting Additional Equipment  
 FAC001 Additional Facilities

FAC002	Facilities Rental
FFR001	Non-Metered Service
FFR901	Monthly Flat Fee – Including Taxes
FFR902	Monthly Flat Fee – No Taxes
FUE001	Fuel Adjustment Charge
GEN002	Generation Charge - Measured
GEN003	Generation Charge - Adjusted
GEN004	Generation Charge - Billed
GTC002	Generation/Transmission Charge - Measured
GTC003	Generation/Transmission Charge - Adjusted
GTC004	Generation/Transmission Charge - Billed
GTC005	Generation/Transmission Charge - On Peak
GTC006	Generation/Transmission Charge - Off Peak
GTC007	Energy Charge - Generation
GTC008	Generation/Transmission - On Peak Demand
GTC009	Maximum Demand Generation Charge
GTC010	Generation/Transmission Charge - Int Peak
HOC001	Service Connection Charge
IBC001	Standby Service
IBC014	Non compliance Demand Charge
INT001	Interest on Sale
INT003	ITC Adjustment Interest
LAA001	Bill for Work Performed
LFR901	Locational Forward Reserve
LPC001	Late Payment Charge
MAD000	Maximum Charge
MAD001	Minimum Charge
MSC000	Miscellaneous - See SAC15 for Description
MSC001	Miscellaneous
MSC005	Price Protection
MSC007	Property Damage
MSC008	Court Costs
MSC010	Select Read Cycle Fee
MSC022	Competition Transition Charge
MSC023	CTC2-Dkt 30706: Rate Case Expense
MSC024	System Benefit Fund
MSC025	Nuclear Decommission Chrg
MSC029	Transition Charge 1
MSC033	Special Metering & Non-Standard Metering Reports
MSC034	Retail Clawback
MSC035	Special Billing Service
MSC036	Transition Charge 2
MSC037	Transition Charge 3
MSC039	Adv Metering Cost Recov Factor
MSC040	Underground Facilities
MSC901	Indicates that this charge line is text only, and is often used for subheadings
MSC902	Monthly Flat Fee
ODL001	Outdoor Area Light Charge

ODL002 Street Lighting - Point of Delivery  
 ODL003 Street Lighting - Facilities  
 ODL004 Street Lighting  
 ODL005 Outdoor Lighting - Facilities  
 ODL006 Outdoor Lighting - Asset Recovery  
 ODL007 Outdoor Lighting - (Guard Light) Extra Span Charge  
 PAY001 Payment Agreement  
 RCS001 Reconnect Charge  
 REC001 Renewable Energy Credit  
 RMR001 RMR  
 RRR001 Excess Mitigation Credit  
 RRR006 Rate Reduction Credit  
 RRR008 Merger Savings Credit  
 RRS001 Replacement Reserve Charge (RPRS)  
 RRS002 RPRS Regulatory Recovery  
 RRS003 RPRS Recovery Charge  
 RTC001 Returned Item Charge  
 SER001 Service Charge  
 SER003 Non-standard Switch Charge  
 SER005 Billing & Usage Data Fee  
 SER009 Account Initiation  
 SER010 Special Meter Read  
 SER011 Out of Cycle Meter Reading - Regular Hours  
 SER012 Out of Cycle Meter Rdg-Outside Reg Hrs Non-Holiday  
 SER013 Out of Cycle Meter Rdg-Outside Reg Hours - Holiday  
 SER014 Connection Charge - Self Contained Meter  
 SER015 Connection Charge - Other Connections -Labor  
 SER016 Connection Chrg - Other Connections-Transportation  
 SER017 Connection Charge - Other Connections-Material  
 SER018 Connection Charge - Other Connections -Other  
 SER019 Service Connection  
 SER020 Disconnect/Reconnect Temporary Clearance  
 SER021 Disconnect/Reconnect Temporary Clearance  
 SER022 Disconnect/Reconnect Temporary Clearance  
 SER023 Retail Customer Requested Clearance - Other  
 SER024 Disconnect at Meter  
 SER026 Disconnect at Pole, Weatherhead or Secondary Box  
 SER027 Priority Disconnect  
 SER028 Reconnection Fee  
 SER029 Priority Reconnect  
 SER030 Reconnect at Meter Regular Hours - Regular Route  
 SER031 Reconnect at Meter Regular Hours - Special Route  
 SER032 Reconnect at Meter Outside Reg Hours - Non-Holiday  
 SER033 Reconnect at Meter Outside Regular Hours - Holiday  
 SER034 Reconnect at Pole, Weatherhead or Sec Box -Reg Hrs  
 SER035 Reconn at Pole,Weatherhead, Sec Box-Off Hr Non-Hol  
 SER036 Reconn at Pole,Weatherhead or Sec Box -Off Hrs Hol  
 SER037 Delivery System Facilities Installation - Labor

SER038 Delivery System Facilities Installation - Trans  
 SER039 Delivery System Facilities Installation - Material  
 SER040 Delivery System Facilities Installation - Other  
 SER041 Additional Service Design - Labor  
 SER042 Additional Service Design - Transportation  
 SER043 Additional Service Design - Material  
 SER044 Additional Service Design - Other  
 SER045 Temporary Facilities A  
 SER046 Temporary Facilities B  
 SER047 Temporary Facilities C  
 SER048 Temporary Facilities D - Labor  
 SER049 Temporary Facilities D - Transportation  
 SER050 Temporary Facilities D - Material  
 SER051 Temporary Facilities D - Other  
 SER052 Underground By Pass Cable  
 SER053 Temporary Service  
 SER054 Facilities Relocation / Removal - Labor  
 SER055 Facilities Relocation / Removal - Transportation  
 SER056 Facilities Relocation / Removal - Material  
 SER057 Facilities Relocation / Removal - Other  
 SER058 Meter Test  
 SER059 Meter Test - Single Phase Self Contained  
 SER060 Meter Test - Three Phase Self Contained  
 SER061 Meter Test - Single Phase Instrument Rated  
 SER062 Meter Test - Three Phase Instrument Rated  
 SER063 Meter Test - Instrument Rated  
 SER064 PCB Inquiry  
 SER065 PCB Inquiry and Lab Testing - Labor  
 SER066 PCB Inquiry and Lab Testing -Transportation  
 SER067 PCB Inquiry and Lab Testing - Material  
 SER068 PCB Inquiry and Lab Testing -Other  
 SER069 PCB Inquiry - Additional Transformer  
 SER070 Service Call  
 SER071 Service Call After Hours  
 SER072 Tampering  
 SER073 Off-Site Meter Rdg (OMR) Equip Installation-Reg Hr  
 SER074 Off-Site Meter Rd(OMR)Equip Install-Off Hr Non-Hol  
 SER075 Off-Site Meter Rdg (OMR) Equip Install-Off Hrs Hol  
 SER076 Auto Mtr Rdg Equip Install-Sngl Phs Self Contained  
 SER077 Auto Meter Rdg Equip Install-3 Phase Self Contained  
 SER078 Auto Mtr Rdg Equip Install-Sgl Ph Instrument Rated  
 SER079 Auto Mtr Rdg Equip Install-3 Phas Instrument Rated  
 SER080 Automated Meter Reading-Cycle Meter Read (Monthly)  
 SER081 Auto Meter Rdg -Specific Date Meter Read (Monthly)  
 SER082 Adv Metering Intervl Load Data Equip Install-Labor  
 SER083 Adv Metering Intervl Load Data Equip Install-Trans  
 SER084 Adv Metering Interval Load Data Equip Install-Matl  
 SER085 Adv Metering Intervl Load Data Equip Install-Other



SER086 Adv Meter Interval Load Data Equip Maint (Monthly)  
 SER087 Electrical Pulse Equipment Installation  
 SER088 Electrical Pulse Equip Replacement Isolation Relay  
 SER089 Electrical Pulse Equip Replacement Pulse Initiator  
 SER090 ElecPulseEquipRepl Isolation Relay&Pulse Initiator  
 SER091 Electrical Pulse Equip Replacement Enclosure box  
 SER092 Electrical Pulse Equipment Maintenance (Monthly)  
 SER093 Dual Socket Meter Adapter  
 SER094 Power Factor Correction Equip Installation - Labor  
 SER095 Power Factor Correction Equip Installation - Matl  
 SER096 Power Factor Correction Equip Installation - Trans  
 SER097 Power Factor Correction Equip Installation - Other  
 SER098 Non-Standard Service Equipment Inspection/Testing  
 SER100 Retail Delivery Svc Switchover Self Contained Base  
 SER101 Retail Delivery Serv Sw/O Self Contained Base Addr  
 SER102 Retail Delivery Serv Switchover Instr Rated Base  
 SER103 Retail Delivery Serv Sw/O Instr Rated Base Adder  
 SER104 Retail Delivery Serv Sw/O Instr Rated Facil Recovy  
 SER105 Security Light Repair Charge  
 SER106 Miscellaneous Discretionary -Labor  
 SER107 Miscellaneous Discretionary - Material  
 SER108 Misc Discretionary - Transportation  
 SER109 Misc Discretionary - Other  
 SER111 Transmission Facilities Relocation Study - Labor  
 SER112 Transmission Facilities Relocation Study -Material  
 SER113 Transmission Facilities Relocation Study - Trans  
 SER114 Transmission Facilities Relocation Study - Other  
 SER116 Transmission Facilities Relocation - Labor  
 SER117 Transmission Facilities Relocation - Material  
 SER118 Transmission Facilities Relocation - Trans  
 SER119 Transmission Facilities Relocation - Other  
 SER121 Power Factor Corr Facilities Install(Transm)-Labor  
 SER122 Power Factor Corr Facilities Install (Transm)-Matl  
 SER123 Power Factor Corr Facility Install (Transm)-Transp  
 SER124 Power Factor Corr Facilities Install(Transm)-Other  
 SER126 Misc Transmission Discretionary - Labor  
 SER127 Misc Transmission Discretionary -Material  
 SER128 Misc Transmission Discretionary - Transp  
 SER129 Misc Transmission Discretionary - Other  
 SER130 Broken Meter Seal  
 SER131 Service Conductor Temp Removal  
 SER132 Dispatch Order  
 SER133 Denial of Access to Meter  
 SER134 Underground Location  
 SER136 Extraordinary Maintenance Activity  
 SMD000 Refinance  
 SMD001 Appliance Repair  
 SMD003 Commercial Heat Pump/Water htr fin

SMD007	Heat Pump Financing
SMD010	Land and Timber Sale
SMD011	Merchandise
SMD012	Surge Suppressor/Mtr Treater Rental
SMD015	Meter Damage
SMD016	Meter Service Charge
SMD019	Special Meter Read
SMD020	Meter Change
SUR005	Transportation
SUR010	Reg. Entity Fee
TEM001	Temporary Service Charge
TPI001	Utility Charges
TRN000	Transmission - See SAC15 for Description
TRN001	Transmission Service Charge
TRN002	Transmission Cost Recov Factor/Transmission Charge - Measured
TRN005	Network Integration Transmission Charge
TRN016	Transmission Charge - Adjusted
TRN017	Transmission Charge - Billed
TRN901	Transmission Service Charge Adjustment
TRN902	Transmission Cost Recov Factor Adj
TRS001	Transfer
VCR001	Project share/one-time charge
ZZZ999	Not yet coded