

# **Detroit Edison Implementation Guide**

**For**

## **Electronic Data Interchange**

### **810 Invoice**

Detroit Edison to Customer

# 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>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BIG	Beginning Segment for Invoice	M	1		
	040	CUR	Currency	O	1		
LOOP ID - N1							200
	070	N1	Name - of Payer	O	1		
	070	N1	Name - Service Name	O	1		
	070	N1	Name - Payee	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		
	140	DTM	Date/Time Reference - Start	O	10		
	140	DTM	Date/Time Reference - End	O	10		

## 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		
	059	MEA	Measurements	O	40		
	120	REF	Reference Identification	O	>1		
	150	DTM	Date/Time Reference - Start	O	10		
	150	DTM	Date/Time Reference - End	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>
Must Use	010	TDS	Total Monetary Value Summary	M	1		

	020	TXI	Tax Information	O	10	
			LOOP ID - SAC		25	
	040	SAC	Service, Promotion, Allowance, or Charge Information	O	1	
	070	CTT	Transaction Totals	O	1	n1
Must Use	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.

**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:**

ST\*810\*0001\

This is the start of a 810 transaction with a control number of 0001

**Data Element Summary**

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
>> ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set 810 Invoice	M ID 3/3
>> ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

<b>Segment:</b>	<b>BIG</b>	<b>Beginning Segment for Invoice</b>
<b>Position:</b>	020	
<b>Loop:</b>		
<b>Level:</b>	Heading	
<b>Usage:</b>	Mandatory	
<b>Max Use:</b>	1	
<b>Purpose:</b>	To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates	
<b>Syntax Notes:</b>		
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 BIG01 is the invoice issue date.</li> <li>2 BIG03 is the date assigned by the purchaser to purchase order.</li> <li>3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.</li> </ol>	
<b>Comments:</b>	1 BIG07 is used only to further define the type of invoice when needed.	
<b>Notes:</b>	BIG*19990123*346069**UTILITY***PR\ This invoice number of 346069 was generated on 01/23/1999. This invoice is for energy related (UTILITY) service or product designated by PR.	

Data Element Summary			
Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
>>	<b>BIG01</b>	<b>373 Date</b>	<b>M DT 8/8</b>
		Date expressed as CCYYMMDD	
		Invoice issued date expressed as CCYYMMDD	
>>	<b>BIG02</b>	<b>76 Invoice Number</b>	<b>M AN 1/22</b>
		Identifying number assigned by issuer	
		Detroit Edison invoice number or the account number plus an eight digit date	
	<b>BIG03</b>	<b>373 Date</b>	<b>O DT 8/8</b>
		Date expressed as CCYYMMDD	
		This will only be used for non-energy billings when a purchase order has been issued expressed as CCYYMMDD	
	<b>BIG07</b>	<b>640 Transaction Type Code</b>	<b>O ID 2/2</b>
		Code specifying the type of transaction	
		PR	Product (or Service)

**Segment:** **CUR** Currency  
**Position:** 040  
**Loop:**  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify the currency (dollars, pounds, francs, etc.) used in a transaction  
**Syntax Notes:**

- 1 If CUR08 is present, then CUR07 is required.
- 2 If CUR09 is present, then CUR07 is required.
- 3 If CUR10 is present, then at least one of CUR11 or CUR12 is required.
- 4 If CUR11 is present, then CUR10 is required.
- 5 If CUR12 is present, then CUR10 is required.
- 6 If CUR13 is present, then at least one of CUR14 or CUR15 is required.
- 7 If CUR14 is present, then CUR13 is required.
- 8 If CUR15 is present, then CUR13 is required.
- 9 If CUR16 is present, then at least one of CUR17 or CUR18 is required.
- 10 If CUR17 is present, then CUR16 is required.
- 11 If CUR18 is present, then CUR16 is required.
- 12 If CUR19 is present, then at least one of CUR20 or CUR21 is required.
- 13 If CUR20 is present, then CUR19 is required.
- 14 If CUR21 is present, then CUR19 is required.

**Semantic Notes:**

**Comments:** 1 See Figures Appendix for examples detailing the use of the CUR segment.

**Notes:** CUR\*BY\*USD\  
The purchaser must pay in US dollars.

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u>		
>>	CUR01	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual BY Buying Party (Purchaser)	<b>M ID 2/3</b>
>>	CUR02	100	<b>Currency Code</b> Code (Standard ISO) for country in whose currency the charges are specified USA United States	<b>M ID 3/3</b>

<b>Segment:</b>	<b>N1</b>	<b>Name - of Payer</b>
<b>Position:</b>	070	
<b>Loop:</b>	N1	Optional
<b>Level:</b>	Heading	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	1	
<b>Purpose:</b>	To identify a party by type of organization, name, and code	
<b>Syntax Notes:</b>	1	At least one of N102 or N103 is required.
	2	If either N103 or N104 is present, then the other is required.
<b>Semantic Notes:</b>		
<b>Comments:</b>	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.
<b>Notes:</b>	N1*BT*WIDGET COMPANY*91*000012345\ The payer is the Widget Company whose master account is 000012345 with a identification qualifier indicating it was assigned by Detroit Edison.	

#### Data Element Summary

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</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
		MQ	Metering Location
		RE	Party to receive commercial invoice remittance
<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/60</b>
			Free-form name
		If N101 is equal to 'BT', the name field will contain the customer name (ex: ABC Company). If N101 is equal to 'MQ', the field will contain the name of the service location (ex: Assembly Plant XYZ).	
<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)
		For Identification Code 91:	
		When N101 is equal to 'BT', the identification code (N101) will be the master account number assigned by Detroit Edison plus the check digit. the account number will be a total of nine digits including leading zeros. All nine digits must be passed back paying.	
		91	Assigned by Seller or Seller's Agent
<b>N104</b>	<b>67</b>	<b>Identification Code</b>	<b>X AN 2/80</b>
			Code identifying a party or other code

<b>Segment:</b>	<b>N1</b> Name - Service 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>	N1*MQ*WIDGET COMPANY PLANT A*91*111345\ The service location name is the Widget Company - Plant A whose order location number is 111345 with a identification qualifier indicating it was assigned by Detroit Edison.

Data Element Summary			
Ref.	Data	Name	Attributes
Des.	Element		
>>	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		BT Bill-to-Party	
		MQ Metering Location	
		RE Party to receive commercial invoice remittance	
N102	93	Name	X AN 1/60
		Free-form name	
		If N101 is equal to 'BT', the name field will contain the customer name (ex: ABC Company). If N101 is equal to 'MQ', the field will contain the name of the service location (ex: Assembly Plant XYZ).	
N103	66	Identification Code Qualifier	X ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		When N101 is equal to 'MQ', the identification code (N101) will be the order item location number (oil) assigned by Detroit Edison. The customer can use this number internally to differentiate accounts. Do not use this number for payment purposes as it will delay payment application significantly. the number to be used on remittance advice is in the Reference Number segment at position 110 on this implementation guide or in N104 when N101 is BT.	
		91 Assigned by Seller or Seller's Agent	
N104	67	Identification Code	X AN 2/80
		Code identifying a party or other code	



<b>Segment:</b>	<b>N1</b> Name - Payee
<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>	N1*RE*DETROIT EDISON COMPANY*92*006957872\ The payee is the Detroit Edison Company whose identification number is 006957872 with a identification qualifier indicating it was assigned by the Widget Company .

Data Element Summary			
Ref.	Data	Name	Attributes
Des.	Element		
>>	<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	
		MQ Metering Location	
		RE Party to receive commercial invoice remittance	
<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/60</b>
		Free-form name	
		If N101 is equal to 'BT', the name field will contain the customer name (ex: ABC Company). If N101 is equal to 'MQ', the field will contain the name of the service location (ex: Assembly Plant XYZ).	
<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)	
		For Identification Code 92:	
		To be used when N101 equal to 'RE'. The identification code (N104) will be a customer assigned vendor number.	
		92 Assigned by Buyer or Buyer's Agent	
<b>N104</b>	<b>67</b>	<b>Identification Code</b>	<b>X AN 2/80</b>
		Code identifying a party or other code	

**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:** N2\*LIMITED\  
The Widget Company had a payer name overflow of Limited.

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>		<b>Attributes</b>
	<b><u>Des.</u></b>	<b><u>Element</u></b>	<b><u>Name</u></b>	
>>	N201	93	Name Free-form name	M AN 1/60

**Segment:** **N3** Address Information  
**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:**

N3\*123 MAIN ST\  
 The Widget Compamy Plant A service address is 123 Main St.

**Data Element Summary**

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

<b>Segment:</b>	<b>N4 Geographic Location</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>	1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location. 2 N402 is required only if city name (N401) is in the U.S. or Canada.
<b>Notes:</b>	N4* DETROIT*MI*48228*USA\ The Widget Company Plant A service location is Detroit,Mi., 48228, USA

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)	
N404	26	Country Code	O ID 2/3
		Code identifying the country	

<b>Segment:</b>	<b>REF</b> <b>Reference Identification</b>
<b>Position:</b>	110
<b>Loop:</b>	N1 Optional
<b>Level:</b>	Heading
<b>Usage:</b>	Optional
<b>Max Use:</b>	12
<b>Purpose:</b>	To specify identifying information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of REF02 or REF03 is required.</li> <li>2 If either C04003 or C04004 is present, then the other is required.</li> <li>3 If either C04005 or C04006 is present, then the other is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 REF04 contains data relating to the value cited in REF02.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	<p>REF*AJ*000012345\</p> <p>The Widget Company's master account plus check digit of 000012345 which Widget Company needs to return to Detroit Edison on their remittance advice.</p>

Data Element Summary			
Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
>> REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification	<b>M ID 2/3</b>
		<p>For Reference Number Code AJ:</p> <p>This is the number Detroit Edison needs returned on their remittance advice. It is a nine character field padded with zeros. It contains the Detroit Edison master account number and the check digit (ie: 000011859). Please pass back all nine numbers including the leading zeros. Do not send the OIL number given to you in the N104 as this will delay application of your payment significantly.</p>	
		AJ	Accounts Receivable Customer Account
REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

<b>Segment:</b>	<b>PER Administrative Communications Contact</b>
<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>	PER*CR*CUSTOMER REPRESENTATIVE*TE*8004774747\ The contact person at Detroit Edison Company regarding this bill is a Customer Representative whose telephone number is 800-477-4747.

Data Element Summary			
Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
>> PER01	366	<b>Contact Function Code</b>	<b>M ID 2/2</b>
		Code identifying the major duty or responsibility of the person or group named	
		CR Customer Relations	
PER02	93	<b>Name</b>	<b>O AN 1/60</b>
		Free-form name	
		Name of office or person to be contacted regarding bills	
PER03	365	<b>Communication Number Qualifier</b>	<b>X ID 2/2</b>
		Code identifying the type of communication number	
		TE Telephone	
PER04	364	<b>Communication Number</b>	<b>X AN 1/80</b>
		Complete communications number including country or area code when applicable	

<b>Segment:</b>	<b>ITD</b> Terms of Sale/Deferred Terms of Sale
<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>	<ol style="list-style-type: none"> <li>1 If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.</li> <li>2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.</li> <li>3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 ITD15 is the percentage applied to a base amount used to determine a late payment charge.</li> </ol>
<b>Comments:</b>	<ol style="list-style-type: none"> <li>1 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.</li> </ol>
<b>Notes:</b>	ITD*05*04*****19990215\ Payment is due 02/15/1999 without any discounts applicable.

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
ITD01	336	Terms Type Code	O ID 2/2
		Code identifying type of payment terms	
		05 Discount Not Applicable	
ITD02	333	Terms Basis Date Code	O ID 1/2
		Code identifying the beginning of the terms period	
		4 Specified Date	
ITD06	446	Terms Net Due Date	O DT 8/8
		Date when total invoice amount becomes due expressed in format CCYYMMDD	

**Segment:** **DTM** **Date/Time Reference - Start**  
**Position:** 140  
**Loop:**  
**Level:** Heading  
**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:**

DTM\*186\*19981215\  
 The beginning of the billing period is 12/15/1998

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>	<b>Date/Time Qualifier</b>	<b>M ID 3/3</b>
>> <b>DTM01</b>	<b>374</b>	Code specifying type of date or time, or both date and time	
		186 Invoice Period Start	
		When the billing period covered by an invoice begins	
		187 Invoice Period End	
		When the billing period covered by an invoice ends	
<b>DTM02</b>	<b>373</b>	<b>Date</b>	<b>X DT 8/8</b>
		Date expressed as CCYYMMDD	



<b>Segment:</b>	<b>DTM</b>	<b>Date/Time Reference - End</b>
<b>Position:</b>	140	
<b>Loop:</b>		
<b>Level:</b>	Heading	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	10	
<b>Purpose:</b>	To specify pertinent dates and times	
<b>Syntax Notes:</b>	<div><div>1</div>At least one of DTM02 DTM03 or DTM05 is required.</div> <div><div>2</div>If DTM04 is present, then DTM03 is required.</div> <div><div>3</div>If either DTM05 or DTM06 is present, then the other is required.</div>	
<b>Semantic Notes:</b>		
<b>Comments:</b>		
<b>Notes:</b>	<div>DTM*187*19990114\</div> <div>The end of the billing period is 01/14/1999.</div>	

Data Element Summary			
Ref.	Data		
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
DTM01	374	Date/Time Qualifier	M ID 3/3
		Code specifying type of date or time, or both date and time	
		186	Invoice Period Start
			When the billing period covered by an invoice begins
		187	Invoice Period End
			When the billing period covered by an invoice ends
DTM02	373	Date	X DT 8/8
		Date expressed as CCYYMMDD	

**Segment:** **IT1** **Baseline Item Data (Invoice)**  
**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:** IT1\*\*3887\*KH\*.09995\*SV\*ELECTRIC\  
 3887 KH (Kilwatt Hours) of Electric service was used. The rate is .09995 per KH.

#### Data Element Summary

Ref.	Data		Attributes
Des.	Element	Name	X R 1/10
IT102	358	Quantity Invoiced	
		Number of units invoiced (supplier units)	
		In the case of metered utilities, the quantity represents the metered quantity with corrections. Generally, this will be consumption (may be negative or zero).	
IT103	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	
		99 Watt	
		K1 Kilowatt Demand	
		Represents potential power load measured at predetermined intervals	
		K2 Kilovolt Amperes Reactive Demand	
		Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter	
		K3 Kilovolt Amperes Reactive Hour	
		Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters	
		K4 Kilovolt Amperes	
		Measure of electrical power	
		K5 Kilovolt Amperes Reactive	
		Measure of electrical power	
		KH Kilowatt Hour	

		<i>ZZ</i>	Mutually Defined	
<b>IT104</b>	<b>212</b>	<b>Unit Price</b>		<b>X R 1/17</b>
		Price per unit of product, service, commodity, etc.		
		Line item total (in monetary units) equal IT102 x IT104. This value is calculated and included in the accumulation of the TDS segment. NOTE: There could be rounding errors in this calculation.		
<b>IT106</b>	<b>235</b>	<b>Product/Service ID Qualifier</b>		<b>X ID 2/2</b>
		Code identifying the type/source of the descriptive number used in Product/Service ID (234)		
		<i>ZZ</i>	Mutually Defined	
<b>IT107</b>	<b>234</b>	<b>Product/Service ID</b>		<b>X AN 1/48</b>
		Identifying number for a product or service		

<b>Segment:</b>	<b>MEA</b> <b>Measurements</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>	<ol style="list-style-type: none"> <li>1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.</li> <li>2 If MEA05 is present, then MEA04 is required.</li> <li>3 If MEA06 is present, then MEA04 is required.</li> <li>4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.</li> <li>5 Only one of MEA08 or MEA03 may be present.</li> </ol>
<b>Semantic Notes:</b>	1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.
<b>Comments:</b>	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.
<b>Notes:</b>	<p>MEA*EA**1*****12\</p> <p>The meter reading at beginning was estimated but actual at end. The multiplier on the meter is 1.</p>

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
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	
		Used when billing charges are based on contractual agreements or pre-established usage and not on actual usage	
		EA Meter reading-beginning estimated/ending actual	
		EE Meter reading-beginning estimated/ending estimated	
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	
		MU Multiplier	
		RUD Usage Deviation (Applies to Kilowatt Hours, Kilowatt Demand and Reactive Demand)	
MEA03	739	<b>Measurement Value</b>	<b>X R 1/20</b>
		The value of the measurement	
		Meter constant - use a value of 1 when no multiplier is present. If MEA02 equals 'RUD', use adjustment quantity.	
MEA08	936	<b>Measurement Attribute Code</b>	<b>X ID 2/2</b>
		Code used to express an attribute response when a numeric measurement value cannot be determined	
		12 OK	

**Segment:** **REF** **Reference Identification**  
**Position:** 120  
**Loop:** IT1 Optional  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** >1  
**Purpose:** To specify identifying information  
**Syntax Notes:**  
**1** At least one of REF02 or REF03 is required.  
**2** If either C04003 or C04004 is present, then the other is required.  
**3** If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:**  
**1** REF04 contains data relating to the value cited in REF02.  
**Comments:**  
**Notes:** REF\*MG\*123456\

The meter number for this service location is 123456.

### Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
>> REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification	<b>M ID 2/3</b>
		45 Old Account Number Identifies accounts being changed	
		46 Old Meter Number Identifies meters being removed	
		AA Accounts Receivable Statement Number	
		CT Contract Number	
		HI Health Industry Number (HIN)	
		LI Line Item Identifier (Seller's)	
		MG Meter Number	
		RB Rate code number	
REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

**Segment:** **DTM** **Date/Time Reference - 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:**

DTM\*150\*19981215\  
 The beginning of the service period of 12/15/1998.

**Data Element Summary**

Ref.	Data	Name	Attributes
Des.	Element		
>> DTM01	374	<b>Date/Time Qualifier</b>	<b>M ID 3/3</b>
		Code specifying type of date or time, or both date and time	
		007 Effective	
		150 Service Period Start	
		151 Service Period End	
DTM02	373	<b>Date</b>	<b>X DT 8/8</b>
		Date expressed as CCYYMMDD	

**Segment:** **DTM** **Date/Time Reference - 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:**

DTM\*151\*19990114\  
The end of the service period of 01/14/1999.

**Data Element Summary**

Ref.	Data	Name	Attributes
Des.	Element		
>> DTM01	374	<b>Date/Time Qualifier</b>	<b>M ID 3/3</b>
		Code specifying type of date or time, or both date and time	
		007 Effective	
		150 Service Period Start	
		151 Service Period End	
DTM02	373	<b>Date</b>	<b>X DT 8/8</b>
		Date expressed as CCYYMMDD	

<b>Segment:</b>	<b>SLN Subline Item Detail</b>
<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>

**Data Element Summary**

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>		
>>	SLN01	<b>350 Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	<b>M AN 1/20</b>
	SLN02	<b>350 Assigned Identification</b> Alphanumeric characters assigned for differentiation within a transaction set	<b>O AN 1/20</b>
>>	SLN03	<b>662 Relationship Code</b> Code indicating the relationship between entities Refer to 004010 Data Element Dictionary for acceptable code values.	<b>M ID 1/1</b>
	SLN04	<b>380 Quantity</b> Numeric value of quantity	<b>X R 1/15</b>



<b>Segment:</b>	<b>SAC</b>	<b>Service, Promotion, Allowance, or Charge Information</b>
<b>Position:</b>	230	
<b>Loop:</b>	SLN	Optional
<b>Level:</b>	Detail	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	25	
<b>Purpose:</b>	To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge	
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of SAC02 or SAC03 is required.</li> <li>2 If either SAC03 or SAC04 is present, then the other is required.</li> <li>3 If either SAC06 or SAC07 is present, then the other is required.</li> <li>4 If either SAC09 or SAC10 is present, then the other is required.</li> <li>5 If SAC11 is present, then SAC10 is required.</li> <li>6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.</li> <li>7 If SAC14 is present, then SAC13 is required.</li> <li>8 If SAC16 is present, then SAC15 is required.</li> </ol>	
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.</li> <li>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.</li> <li>3 SAC08 is the allowance or charge rate per unit.</li> <li>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.</li> <li>5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.</li> <li>6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.</li> <li>7 SAC16 is used to identify the language being used in SAC15.</li> </ol>	
<b>Comments:</b>	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> </ol>	
<b>Notes:</b>	<p>SAC*C**EU*BAS001*10.00*****06 SERVICE CHARGE\ The charge by the electrical utility is \$10.00 for a Service Charge.</p>	

Data Element Summary			
Ref.	Data	Name	Attributes
Des.	Element		
>>	SAC01	248 Allowance or Charge Indicator	M ID 1/1
		Code which indicates an allowance or charge for the service specified	
		A Allowance	
		C Charge	
		N No Allowance or Charge	
SAC03	559	Agency Qualifier Code	X ID 2/2
		Code identifying the agency assigning the code values	
		EU Electric Utilities	
SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	X AN 1/10
		Agency maintained code identifying the service, promotion, allowance, or charge	
		ADJ001 Cost recovery adjustment	

		ADJ002	Adjustment to rate or consumption		
		BAS001	Service charge		
		CRE001	Credit		
		DAB002	Interest earned on cash deposite		
		DMD001	Billed demand		
		DSC003	Disconnect charges		
		ENC001	Charge for energy used		
		FAC002	Equipment and service charge		
		LAA001	Charges for labor or materials		
		LPC001	Late payment charge		
		MAD001	Minimum charge under tariff or rate		
		MSC001	Miscellaneous charge		
		PFA001	Power factor adjustment		
		RTC001	Returned check fee		
		SUR000	Mandated fee imposed by regulatory agency		
<b>SAC05</b>	<b>610</b>	<b>Amount</b>		<b>O</b>	<b>N2 1/15</b>
		Monetary amount			
<b>SAC12</b>	<b>331</b>	<b>Allowance or Charge Method of Handling Code</b>		<b>O</b>	<b>ID 2/2</b>
		Code indicating method of handling for an allowance or charge			
		04	Credit Customer Account		
		06	Charge to be Paid by Customer		
<b>SAC15</b>	<b>352</b>	<b>Description</b>		<b>X</b>	<b>AN 1/80</b>
		A free-form description to clarify the related data elements and their content			

<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>	TDS*41045*00*00*00\ The total invoice amount is 410.45.	

Data Element Summary				
Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
>> TDS01	610	Amount Monetary amount	M	N2 1/15
TDS02	610	Amount Monetary amount	O	N2 1/15
TDS03	610	Amount Monetary amount	O	N2 1/15
TDS04	610	Amount Monetary amount	O	N2 1/15

<b>Segment:</b>	<b>TXI Tax Information</b>
<b>Position:</b>	020
<b>Loop:</b>	
<b>Level:</b>	Summary
<b>Usage:</b>	Optional
<b>Max Use:</b>	10
<b>Purpose:</b>	To specify tax information
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of TXI02 TXI03 or TXI06 is required.</li> <li>2 If either TXI04 or TXI05 is present, then the other is required.</li> <li>3 If TXI08 is present, then TXI03 is required.</li> </ol>
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 TXI02 is the monetary amount of the tax.</li> <li>2 TXI03 is the tax percent expressed as a decimal.</li> <li>3 TXI07 is a code indicating the relationship of the price or amount to the associated segment.</li> </ol>
<b>Comments:</b>	
<b>Notes:</b>	TXI*ST*23.23\ The state sales tax is 23.23.

Data Element Summary			
Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>M</u> <u>ID</u> <u>2/2</u>
>> TXI01	963	<b>Tax Type Code</b> Code specifying the type of tax CA City Tax Service Tax imposed by City CS City Sales Tax ET Energy Tax Tax applied to the utility and petroleum industries ST State Sales Tax UL License Tax Tax used to report the amount of license tax which is passed to the consumer	
TXI02	782	<b>Monetary Amount</b> Monetary amount	X R 1/18
TXI03	954	<b>Percent</b> Percentage expressed as a decimal	X R 1/10
TXI04	955	<b>Tax Jurisdiction Code Qualifier</b> Code identifying the source of the data used in tax jurisdiction code Refer to 004010 Data Element Dictionary for acceptable code values.	X ID 2/2
TXI05	956	<b>Tax Jurisdiction Code</b> Code identifying the taxing jurisdiction	X AN 1/10
TXI06	441	<b>Tax Exempt Code</b> Code identifying exemption status from sales and use tax 1 Yes (Tax Exempt) 2 No (Not Tax Exempt)	X ID 1/1

<b>Segment:</b>	<b>SAC</b>	<b>Service, Promotion, Allowance, or Charge Information</b>
<b>Position:</b>	040	
<b>Loop:</b>	SAC	Optional
<b>Level:</b>	Summary	
<b>Usage:</b>	Optional	
<b>Max Use:</b>	1	
<b>Purpose:</b>	To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge	
<b>Syntax Notes:</b>	<ol style="list-style-type: none"> <li>1 At least one of SAC02 or SAC03 is required.</li> <li>2 If either SAC03 or SAC04 is present, then the other is required.</li> <li>3 If either SAC06 or SAC07 is present, then the other is required.</li> <li>4 If either SAC09 or SAC10 is present, then the other is required.</li> <li>5 If SAC11 is present, then SAC10 is required.</li> <li>6 If SAC13 is present, then at least one of SAC02 or SAC04 is required.</li> <li>7 If SAC14 is present, then SAC13 is required.</li> <li>8 If SAC16 is present, then SAC15 is required.</li> </ol>	
<b>Semantic Notes:</b>	<ol style="list-style-type: none"> <li>1 If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.</li> <li>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.</li> <li>3 SAC08 is the allowance or charge rate per unit.</li> <li>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.</li> <li>5 SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.</li> <li>6 SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.</li> <li>7 SAC16 is used to identify the language being used in SAC15.</li> </ol>	
<b>Comments:</b>	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> </ol>	

#### Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
>>	<b>SAC01</b>	<b>248 Allowance or Charge Indicator</b>	<b>M ID 1/1</b>
		Code which indicates an allowance or charge for the service specified	
		A	Allowance
		C	Charge
		N	No Allowance or Charge
	<b>SAC04</b>	<b>1301 Agency Service, Promotion, Allowance, or Charge Code</b>	<b>X AN 1/10</b>
		Agency maintained code identifying the service, promotion, allowance, or charge	
		SAC*C**EU*BAS001*10.00*****06 SERVICE CHARGE\	
		The charge by the electrical utility is \$10.00 for a Service Charge.	
		ADJ001	Cost recovery adjustment
		ADJ002	Adjustment to rate or consumption
		BAS001	Service charge
		CRE001	Credit

DAB002	Interest earned on cash deposite
DMD001	Billed demand
DSC003	Disconnect charges
ENC001	Charge for energy used
FAC002	Equipment and service charge
LAA001	Charges for labor or materials
LPC001	Late payment charge
MAD001	Minimum charge under tariff or rate
MSC001	Miscellaneous charge
PFA001	Power factor adjustment
RTC001	Returned check fee
SUR000	Mandated fee imposed by regulatory agency

<b>SAC05</b>	<b>610</b>	<b>Amount</b>	<b>O</b>	<b>N2 1/15</b>
		Monetary amount		
<b>SAC12</b>	<b>331</b>	<b>Allowance or Charge Method of Handling Code</b>	<b>O</b>	<b>ID 2/2</b>
		Code indicating method of handling for an allowance or charge		
		Refer to 004010 Data Element Dictionary for acceptable code values.		
<b>SAC15</b>	<b>352</b>	<b>Description</b>	<b>X</b>	<b>AN 1/80</b>
		A free-form description to clarify the related data elements and their content		

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

Data Element Summary			
Ref.	Data	Name	Attributes
Des.	Element		
>>	<b>CTT01</b>	<b>354</b> <b>Number of Line Items</b> Total number of line items in the transaction set	<b>M N0 1/6</b>
	<b>CTT02</b>	<b>347</b> <b>Hash Total</b> Sum of values of the specified data element. All values in the data element will be summed without regard to decimal points (explicit or implicit) or signs. Truncation will occur on the left most digits if the sum is greater than the maximum size of the hash total of the data element. Example: -.0018 First occurrence of value being hashed. .18 Second occurrence of value being hashed. 1.8 Third occurrence of value being hashed. 18.01 Fourth occurrence of value being hashed. ----- 1855 Hash total prior to truncation. 855 Hash total after truncation to three-digit field.	<b>O R 1/10</b>
	<b>CTT03</b>	<b>81</b> <b>Weight</b> Numeric value of weight	<b>X R 1/10</b>
	<b>CTT04</b>	<b>355</b> <b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	<b>X ID 2/2</b>
	<b>CTT05</b>	<b>183</b> <b>Volume</b> Value of volumetric measure	<b>X R 1/8</b>
	<b>CTT06</b>	<b>355</b> <b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken Refer to 004010 Data Element Dictionary for acceptable code values.	<b>X ID 2/2</b>
	<b>CTT07</b>	<b>352</b> <b>Description</b> A free-form description to clarify the related data elements and their content	<b>O AN 1/80</b>

<b>Segment:</b>	<b>SE</b>	<b>Transaction Set Trailer</b>
<b>Position:</b>	080	
<b>Loop:</b>		
<b>Level:</b>	Summary	
<b>Usage:</b>	Mandatory	
<b>Max Use:</b>	1	
<b>Purpose:</b>	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)	
<b>Syntax Notes:</b>		
<b>Semantic Notes:</b>		
<b>Comments:</b>	<b>1</b> SE is the last segment of each transaction set.	
<b>Notes:</b>	SE*34*0001\	
	There are 34 segments for transaction control number 0001	

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