

# New York Implementation Standard

## For Standard Electronic Transactions

TRANSACTION SET

# 810 Invoice

## Single Retailer Model

Ver/Rel 00401

	<b><u>Summary of Changes</u></b>
<u>July 19, 2006</u>	<u>Release 2.0</u>
<u>October 23, 2014</u> <u>Version 2.1</u>	<u>Version 2.1</u>
	<u>Utility specific notes are generalized, as appropriate, and designated for relocation to/reference within Utility Maintained EDI Guides, as necessary.</u>
	<u>Replaced references to Marketer and E/M with ESCO.</u>

	Notes pertaining to the use of this document
Purpose	<ul style="list-style-type: none"> <li>This 810 Single Retailer Invoice Transaction Set is used to transmit billing information to the ESCO/<del>Marketer</del> for charges due to the Utility. These standards are based on the ASC X12 Ver/Rel 004010 standard and related UIG guidelines.</li> </ul>
Several types of 810 transactions used in Single Retailer Model	<ul style="list-style-type: none"> <li><del>At this time, National Fuel Gas Distribution Corporation is the only utility offering the Single Retailer Model.</del></li> <li>Up to three (3) different types of 810 billing transactions may be transmitted under the Single Retailer Model. The acronym 'EURC' refers to End Use Retail Customer: <ul style="list-style-type: none"> <li>➤ <u>810 EURC Cycle Invoice</u> will contain the individual charge information for end use retail customers based on cycle billings. This invoice is used to provide detail that the ESCO can use for EURC billing.</li> <li>➤ <u>810 EURC Calendar Month Estimate Invoice</u> will contain individual charge information for end use retail customers based on a calendar month estimate. <del>For NFG these invoices provide detail that the ESCO can use to reconcile their monthly summary invoices.</del></li> <li>➤ <u>ESCO Summary Invoice</u> will contain charges (business-to-business charges assessed by the Utility and payable by the ESCO/<del>Marketer</del>) that are unrelated to specific EURC accounts, as well as a summarization of the individual EURC charges. This Invoice will also contain the total balance due from the ESCO/<del>Marketer</del> and the date payment is expected. This is the invoice that should be used as the basis for payment. The Utility assigned account number for the ESCO/<del>Marketer</del> (REF*AJ) sent in an ESCO Summary Invoice must be included in any documentation accompanying the ESCO/<del>Marketer</del>'s payment(s) to the Utility. <del>NFG will send this invoice on a calendar month basis, along with the EURC Calendar Month Estimate Invoices.</del></li> </ul> </li> </ul>
Validation Fields	<ul style="list-style-type: none"> <li>EURC invoices may be validated using the customer's utility account number (with check digit, if included) sent in REF*12. The ESCO Summary Invoice does not contain any utility customer account numbers. The Utility account number for the ESCO/<del>Marketer</del> (with check digit, if included), sent in REF*AJ, should be used to validate ESCO Summary Invoice transactions.</li> </ul>
One or multiple accounts per 810 Invoice	<ul style="list-style-type: none"> <li>Each EURC invoice transaction may contain only one account for one commodity (i.e. electric, gas, etc.). The ESCO Summary Invoice may contain bill information related to either or both commodities.</li> </ul>

<i>Dates</i>	<ul style="list-style-type: none"> <li>For the EURC Cycle Invoice, the period start date in the 810 must match the earliest period start date indicated in DTM*150 in the QTY loop(s) of the applicable PTD loop sent in the corresponding 867.</li> <li>For the EURC Cycle Invoice, the period end date in the 810 must match the latest period end date indicated in DTM*151 in the QTY loop(s) of the applicable PTD loop sent in the corresponding 867.</li> <li>For the EURC Calendar Month Estimate Invoice, the dates are beginning and ending dates for the calendar month the CME is for.</li> <li>For the ESCO Summary Invoice, the date segments are optional.</li> <li>The DTM*009 will be used to send the date that an adjustment was applied to the account.</li> </ul>
Purchase Order Number	<ul style="list-style-type: none"> <li>The EURC Cycle or Calendar Month Estimate Invoice transaction will be linked to the corresponding ESCO Summary Invoice through the use of a common Purchase Order number (sent in BIG04) on both transactions. Refer to the gray box notes for the BIG04 element in this guide for more information.</li> </ul>
<i>BAL Segments</i>	<ul style="list-style-type: none"> <li>BAL segments are only sent in an 810 ESCO Summary Invoice. There are four BAL segments in the Single Retailer 810 Invoice Transaction Standard. These four segments work in concert with each other to communicate details about the balance on the ESCO/<del>Marketers</del> account with the Utility. <ul style="list-style-type: none"> <li>➤ The BAL*P*YB (Prior Balance) is the amount sent in the Total Outstanding Balance segment (BAL*M*YB) is the previous ESCO Summary Invoice.</li> <li>➤ The BAL*P*TP (Total Payments and Refunds) is the sum of all payments made and refunds applied since the last ESCO Summary Invoice. The details for each individual payment and/or refund is sent in a PAM segment (see below).</li> <li>➤ The BAL*M*9J (Beginning Balance) is the sum of the amount sent in the Prior Balance segment (BAL*P*YB) and the amount sent in the Total Payments and Refunds segment (BAL*P*TP).</li> <li>➤ The BAL*M*YB (Total Outstanding Balance) is the sum of the amount sent in the Beginning Balance segment (BAL*M*9J) plus the amount sent in the TDS segment of the Summary Invoice.</li> </ul> </li> </ul>

<p><i>Rejection</i></p>	<ul style="list-style-type: none"> <li>• An 810 EURC Invoice transaction may be rejected via a 997 transaction for syntax errors or missing/invalid data segments/elements. These invoices may also be rejected, via an 824 Application Advice transaction, when: <ul style="list-style-type: none"> <li>➤ EURC Invoice contains an invalid Utility Account Number for the end use customer (Account number not valid for <del>E/MESCO</del>)</li> <li>➤ EURC Invoice contains charges associated with the wrong commodity (Account does not have service requested with <del>E/MESCO</del>)</li> <li>➤ EURC Invoice contains a cross reference number in the BIG05 element that does not match the reference number previously sent in the corresponding 867 transaction (Cycle Invoice Only)</li> </ul> </li> <li>• An 810 ESCO Summary Invoice transaction may be rejected via a 997 transaction for syntax errors or missing/invalid data segments/elements. Please refer to the Implementation Guide for the 997 for a list of possible rejection codes. This transaction may also be rejected, via an 824 Application Advice transaction, when it contains an invalid account number for the <del>ESCO/Marketer</del> or charges associated with the wrong commodity (a gas marketer receives an invoice containing electric charges).</li> <li>• The Utility will contact the <del>ESCO/Marketer</del> directly to resolve the problem when an ESCO Summary Invoice has been rejected. In some instances a corrected Summary Invoice may be sent.</li> </ul>
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<i>PAM Segment</i>	<ul style="list-style-type: none"> <li>• A PAM segment is sent in an 810 ESCO Summary Invoice to communicate the date and amount of each payment or refund included in the amount sent in the Total Payments and Refunds BAL segment (BAL*P*TP).</li> <li>• There may be more than one PAM segment in an ESCO Summary Invoice or, when there are no payments or refunds applicable for the period covered by the Summary Invoice, no PAM segment will be sent.</li> </ul>
Previous Utility Account Number	<ul style="list-style-type: none"> <li>• The REF*45 segment has been removed from this Implementation Guide. The utility currently offering the Single Retailer model does not have account numbers that would change due to re-folio, therefore, this segment would never be used.</li> </ul>
<i>SLN Loop</i>	<ul style="list-style-type: none"> <li>• Each SLN Loop is comprised of one SLN segment and one corresponding SAC segment.</li> <li>• The SLN segment is used as a loop counter for the SAC segment.</li> <li>• Multiple SLN loops may be sent per IT1 loop.</li> <li>• The amounts sent in SAC05 in the SAC segment within an SLN loop must apply at the level defined in IT109.</li> <li>• When no charges exist at the level defined in IT109 in an IT1 loop, an SLN loop will not be sent. For example, when all taxes are applied at an ACCOUNT level but other charges are applied at the RATE or GASPOOL level, the IT1 Loop where IT109=ACCOUNT will contain a TXI segment but will not contain an SLN loop.</li> <li>• The SLN03 element in the SLN segment is always equal to 'A' for 'Add'. This data element is required by X12 when an SLN segment is sent. The SLN03 code value "Add" should not be confused with a similar code value sent in the TXI07 element, or with values sent in an SAC01 element, that are used to indicate when an amount should be included or excluded when summing the invoice total in the TDS segment.</li> </ul>
<i>IT1 Loop</i>	<ul style="list-style-type: none"> <li>• Multiple IT1 Loops may be sent in each 810 Invoice transaction.</li> <li>• The IT1 Loop contains an IT1 segment. This segment is used to indicate whether billed amounts contained in the IT1 Loop apply to the entire account (IT109=ACCOUNT), apply to a rate (IT109=RATE) or apply to a specific gas pool (IT109=GASPOOL).</li> <li>• The TXI segment is a data segment within the IT1 loop.</li> <li>• The SLN loop (see below) is within the IT1 loop.</li> <li>• When tax amounts are sent in the TXI02 element of the TXI segment, the taxes must apply at the level defined in the IT109 element.</li> <li>• When no taxes were applied at the level defined in the IT109 element a TXI segment should not be sent in that IT1 loop. For example, when all taxes were applied at an account level, an IT1 loop where IT109=RATE would not contain a TXI segment.</li> <li>• Each IT1 Loop that is sent must contain either a TXI Segment or an SLN loop, and may contain both, with amounts that apply at the level defined in the IT109 element.</li> </ul>

810 Original/Cancel	<ul style="list-style-type: none"> <li>• The EURC Cycle Invoice or Calendar Month Estimate Invoice may be either an original invoice or a cancel invoice transaction. An ESCO Summary Invoice transaction will always be an original invoice.</li> <li>• The 810 Original EURC Cycle or Calendar Month Estimate Invoice (BIG08 = 00) or the 810 Cancel EURC Cycle or Calendar Month Estimate Invoice (BIG08 = 01) must cross-reference the corresponding 867 usage transaction by sending the reference number originally sent in the BPT02 element of the original 867 transaction in the BIG05 element of the Invoice.</li> <li>• An 810 Cancel EURC Cycle or Calendar Month Estimate Invoice must also cross-reference the original 810 invoice transaction. The Cancel transaction must contain a REF*OI (Original Invoice Number) segment and the REF02 element must contain the reference number sent in the BIG02 element from the original 810 Invoice.</li> <li>• When usage is cancelled via an 867 Cancel Usage transaction, the utility must also transmit an 810 Cancel EURC Cycle or Calendar Month Estimate Invoice to cancel the charges related to the usage cancelled in the 867 Cancel Usage transactions.</li> <li>• The 810 Cancel Invoice will only cancel those charges that applied to usage in the Original Invoice. For example, a switching charge applied to the EURC, which needs to be reversed would be an adjustment and not a cancelled charge.</li> <li>• The TDS segment must be sent in 810 Cancel Invoice transactions to indicate the total amount of charges and taxes being cancelled. TDS01 will equal the total of TXI02 and SAC05 where TXI07 = A for 'Add' and SAC01 = C for 'Charge'.</li> <li>• When a customer is re-billed after an 867 Usage transaction and its corresponding 810 Invoice have been canceled, a new 867 Usage transaction and a new 810 Invoice must be sent to the ESCO/<del>Marketer</del>. Each trading partner must process all 867 Cancel transactions prior to processing 867MU original usage transactions.</li> </ul>
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<i>SAC Segment</i>	<ul style="list-style-type: none"> <li>• This segment contains all Charges and/or Adjustments, other than tax amounts, presented on the invoice.</li> <li>• SAC01 is used to indicate the disposition of amounts sent in the SAC05 element. Amounts sent are to be treated as either “Charge” items or “No Charge” items depending on the code sent in SAC01.</li> <li>• Typically the SAC08 multiplied by the SAC10 will equal the SAC05. However, in certain situations the SAC08 x SAC10 will not equal SAC05. For example, amounts calculated for prorated periods or when the minimum demand is greater than the peak demand for the reported period.</li> <li>• Charge items – “Charge” items are monetary amounts displayed in SAC05 that should be included in the invoice total sent in TDS01. SAC01 should indicate ‘C’ for ‘Charge’ when the charges in SAC05 should be included in the invoice total displayed in TDS01.</li> <li>• No Charge items – “No Charge” items are monetary amounts displayed in SAC05 that should NOT be included in the invoice total sent in TDS01. SAC01 should indicate ‘N’ for ‘No Charge’ when the charges in SAC05 should NOT be included in the invoice total display in TDS01.</li> <li>• SAC08, SAC09 and SAC10 are dependant elements. If one is sent then the others must always be sent.</li> <li>• SAC15 will always be sent and will provide a more detailed text description of the charge amount.</li> <li>• For the ESCO Summary Invoice transaction, the total of the TDS segments from the corresponding EURC Cycle or Calendar Month Estimate Invoices will be sent in an SAC segment where SAC04 equals DIS005 - Total Invoiced Distribution Charges. These amounts will include the TDS amount from both original and cancel EURC Invoices.</li> </ul>
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<p>Data Element Attributes</p>	<ul style="list-style-type: none"> <li>• Data elements whose X12 attribute type is ‘R’ (for example the TXI02 or the SAC08 elements) are treated as real numbers. Real numbers are assumed to be positive numbers and a minus (-) sign must precede the amount when a negative number is being sent. Real numbers do NOT provide for an implied decimal position; therefore a decimal point must be sent when decimal precision is required. Note that in transmitting real numbers it is acceptable, but not necessary, to transmit digits that have no significance i.e. leading or trailing zeros: <ul style="list-style-type: none"> <li>➤ a value of one hundred dollars and twenty cents (\$100.20) could be transmitted as 100.2 in an SAC05 element. <div data-bbox="574 609 1105 653" data-label="Text"> <p>TXI~LS~100.2~.06~~~~A~1670</p> </div> </li> <li>➤ a value of one cent (\$0.01) could be transmitted as .01 in an SAC05 element. <div data-bbox="574 800 1130 844" data-label="Text"> <p>TXI~LS~.01~.06~~~~A~.16</p> </div> </li> <li>➤ a value of one hundred dollars and zero cents (\$100.00) could be transmitted as 100 in an SAC05 element. <div data-bbox="589 991 1024 1033" data-label="Text"> <p>TXI~LS~100~.06~~~~A~1666.66</p> </div> </li> <li>➤ a value of minus one hundred dollars and zero cents (-\$100.00) could be transmitted as -100.00 in an SAC05 element. <div data-bbox="589 1178 1073 1220" data-label="Text"> <p>TXI~LS~-100.00~.06~~~~A~1666.66</p> </div> </li> <li>➤ a value of minus one hundred dollars and twenty cents (-\$100.20) could be transmitted as -100.2 in an SAC05 element. <div data-bbox="570 1365 1166 1409" data-label="Text"> <p>TXI~LS~-100.2~.06~~~~A~-1670</p> </div> </li> </ul> </li> <li>• Data elements whose X12 attribute type is ‘N’ are treated as numbers with implied decimal precision. Similar to real numbers (described above), type “N” numbers are assumed to be positive numbers and a minus (-) sign must precede the amount when a negative number is being sent. A decimal point should NOT be sent in an implied decimal field. The number following the ‘N’ in the attribute column for a particular data element indicates the placement of the decimal. For example, the SAC05 element attribute column states “N2 1/15” which indicates that the number of digits following the implied decimal is “2” and amounts sent in this element must contain a minimum of 1 digit and a maximum of 15 digits. For these elements, an EDI translator is expected to expand the values received to include the decimal position indicated which in this example is “2”.</li> </ul>
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	<ul style="list-style-type: none"> <li>In the examples shown below, the recipients translator is expected to determine the correct decimal position as specified in the attribute and map, as is appropriate, for the application data field. In situations where the number of received digits is less than the specified decimal precision the receiving translation is expected to insert zeros as necessary to arrive at the specified decimal precision.</li> <li>➤ a value of one hundred dollars and four cents (\$100.04) would be transmitted as 10004 in an SAC05 element.  SAC~N~~EU~BUD002~<b>10004</b>~~~25.01~EA~4~~~~BUDGET SETTLEMENT AMT</li> <li>➤ a value of one cent (\$0.01) would be transmitted as 1 in and SAC05 element.  SAC~N~~EU~BUD002~<b>1</b>~~~.01~EA~1~~~~BUDGET SETTLEMENT AMT</li> <li>➤ a value of one hundred dollars and zero cents (\$100.00) would be transmitted as 10000 in an SAC05 element.  SAC~N~~EU~BUD002~<b>10000</b>~~~25.00~EA~4~~~~BUDGET SETTLEMENT AMT</li> </ul>
<i>Definitions</i>	<ul style="list-style-type: none"> <li>The term Utility or LDC (Local Distribution Company) is used in this document to refer to the local gas or electric distribution company, i.e. the entity providing regulated bundled commodity service. The term ESCO/<del>Marketer</del> is used in this document to refer to either a gas or electric supplier. The principal parties involved in this Transaction Set 810 implementation guide are: <ul style="list-style-type: none"> <li>➤ The end-use customer (Code 8R)</li> <li>➤ The Utility (LDC) (Code 8S)</li> <li>➤ The Supplier (ESCO/<del>Marketer</del> or <del>E/MESCO</del>) (Code SJ).</li> </ul> </li> </ul>
<i>Companion Documents</i>	<ul style="list-style-type: none"> <li>All of the applicable business rules for New York are not necessarily documented in this implementation guide. Accordingly, the <i>Billing Business Process Document for Single Retailer</i> and the <i>810 Single Retailer Invoice Data Dictionary</i> should be reviewed where further clarification is needed. Further information regarding the processing of EDI transactions may be found in the <i>Technical Operating Profile for Electronic Data Interchange in New York</i>.</li> </ul>

## Implementation Guideline Field Descriptions

<b>Segment:</b>	<b>REF</b>	<b>Reference Identification (Utility Customer Account</b>	<div>This section shows the X12 Rules for this segment, with the exception of the Usage and Max Use fields, which include NY rules. For Usage, “Optional (Must Use)” means that the segment is Optional for X12, but required for NY.</div>
<b>Position:</b>	050		
<b>Loop:</b>			
<b>Level:</b>	Heading		
<b>Usage:</b>	Optional (Must Use)		
<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>	Required  The Utility account number assigned to the customer is used for validation and must be present on all transactions. REF~12~011231287654398		<div>This section displays the NY Rules for implementation of this segment.</div> <div>One or more examples.</div>

### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Mand.</b>	<b>REF01</b>	<b>128</b>	<b>Reference Identification</b>	<b>Qualifier</b>	<b>M ID 2/3</b>
				12 Billing Account	
				REF02 contains the Utility-assigned account number for the customer.	
<b>Must Use</b>	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b>		<b>X AN 1/30</b>
				Utility assigned customer account number	
				The utility account number must be supplied without spaces or non-alphanumeric characters. (Character in visible presentation on a bill, for example, should be moved)	

This column documents differences between X12 and NY use for each data element:

Mand. (Mandatory) – Required by X12  
 Must Use – Required by NY  
 Cond. (Conditional)  
 Optional

These columns show the X12 attributes for each data element:

M = Mandatory  
 O = Optional  
 X = Conditional

AN = Alphanumeric  
 N# = Implied Decimal  
 ID = Identification  
 R = Real  
 DT = Date (CCYYMMDD)

1/30 = Minimum 1, Maximum 30

# 810 Invoice - Single Retailer Model

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.

## Notes:

This transaction set standard defines the requirements for the 810 Invoices sent by the Utility to the ESCO/~~Marketer~~ under the Single Retailer model.

## Heading:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
3	010	ST	Transaction Set Header	M	1		
4	020	BIG	Beginning Segment for Invoice	M	1		
6	050	REF	Reference Identification (Original Invoice Number)	O	1		
7	050	REF	Reference Identification (Utility Customer Account Number)	O	1		
8	050	REF	Reference Identification (Utility Account Number for the ESCO/ <del>Marketer</del> )	O	1		
LOOP ID - N1						1	
9	070	N1	Name (ESCO/ <del>Marketer</del> )	O	1		
LOOP ID - N1						1	
10	070	N1	Name (Utility)	O	1		
LOOP ID - N1						1	
11	070	N1	Name (Customer)	O	1		
12	130	ITD	Terms of Sale/Deferred Terms of Sale	O	1		
13	212	BAL	Balance Detail (Prior Balance)	O	1		
14	212	BAL	Balance Detail (Total Payments and Refunds)	O	1		
15	212	BAL	Balance Detail (Beginning Balance)	O	1		
16	212	BAL	Balance Detail (Total Outstanding Balance)	O	1		
17	214	PAM	Period Amount (Payment Posted or Refund Applied)	O	>1		

## Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
LOOP ID - IT1						200	
19	010	IT1	Baseline Item Data (Charge Level)	O	1		
21	040	TXI	Tax Information	O	10		
22	120	REF	Reference Identification (Bill Cycle)	O	1		
23	120	REF	Reference Identification (Utility Rate Service Class)	O	1		
24	120	REF	Reference Identification (Utility Rate Subclass)	O	1		
25	120	REF	Reference Identification (Gas Pool ID)	O	1		
26	150	DTM	Date/Time Reference (Period Start Date)	O	1		

27	150	DTM	Date/Time Reference (Period End Date)	O	1	
			LOOP ID - SLN			1000
28	200	SLN	Subline Item Detail (Item Counter)	O	1	
30	205	DTM	Date/Time Reference (Process Date)	O	1	
31	230	SAC	Service, Promotion, Allowance, or Charge Information (Charges/Adjustments)	O	1	

### Summary:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
35	010	TDS	Total Monetary Value Summary	M	1		
36	070	CTT	Transaction Totals	O	1		n1
37	080	SE	Transaction Set Trailer	M	1		
E – 1			Examples				

### Transaction Set Notes

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

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

**Notes:** Required

ST~810~000000001

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	ST01	143	Transaction Set Identifier Code 810 Invoice	M ID 3/3
Mand.	ST02	329	Transaction Set Control Number	M AN 4/9

Identifying control number assigned by the originator of a transaction set. This identifier must be unique for each transaction set within a functional group.

**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~20060201~123567890120010201~~123456789~2048392934504~~ME~00

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	BIG01	373	Date	M DT 8/8
			Transaction creation date in sender's system.	
Mand.	BIG02	76	Invoice Number	M AN 1/22
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.	
Cond.	BIG04	324	Purchase Order Number	O AN 1/22
			This element will be sent in the EURC Calendar Month Estimate and the ESCO Summary Invoices. This element is used to link the EURC Calendar Month Estimate and the ESCO Summary Invoices. This element is not used in an EURC Cycle Invoice.	
Cond.	BIG05	328	Release Number	O AN 1/30
			This element is the cross-reference number originally transmitted in the BPT02 element of the 867 Monthly Usage transaction containing the usage/consumption information that is the basis for the charges communicated in the Invoice transaction.	
			<div>EURC Cycle Invoice: Required</div> <div>EURC Calendar Month Estimate: Required</div> <div>ESCO Summary Invoice: Not Applicable</div>	
Must Use	BIG07	640	Transaction Type Code	O ID 2/2
			CI	Consolidated Invoice
				This code is required to identify the 810 ESCO Summary Invoice.
			EM	Estimate of Record
				This code is required to identify an 810 EURC Calendar Month Estimate Invoice.
			FE	Memorandum, Final Bill
				This code is used in an 810 EURC Cycle Invoice to identify a final invoice when either the customer has switched to another ESCO/ <del>Marketer</del> or the customer's account has been closed by the utility.
			ME	Memorandum
				This code will be present in 810 EURC Cycle Invoices when the invoice is NOT the final invoice for this customer for the recipient of the transaction. Final cycle invoices will be identified by the code "FE" (see above).

**Must Use      BIG08      353      Transaction Set Purpose Code      O      ID 2/2**

00      Original

01      Cancellation

EURC Cycle Invoice: Used when canceling the invoice/transaction.

EURC Calendar Month Estimate: Used when canceling the invoice/transaction.

ESCO Summary Invoice: Not Used



**Segment:** **REF** Reference Identification (Original Invoice Number)  
**Position:** 050  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**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:** Conditional

Required in cancel transactions (BIG08=01) for EURC Cycle and EURC Calendar Month Estimate Invoices. This segment is Not Used in ESCO Summary Invoices.

This segment will contain the BIG02 element from the original 810 invoice transaction.

REF~OI~123456789019990102

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	REF01	128	Reference Identification Qualifier	M ID 2/3
			OI	Original Invoice Number
				REF02 contains the Original Invoice Number of the invoice being canceled.
Must Use	REF02	127	Reference Identification	X AN 1/30
			Original Invoice Number	

**Segment:** **REF** Reference Identification (Utility Customer Account Number)  
**Position:** 050  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**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:** Conditional

EURC Cycle Invoice: Required  
 EURC Calendar Month Estimate: Required  
 ESCO Summary Invoice: Not Used

The Utility account number assigned to the end use customer is used for validating EURC Cycle and EURC Calendar Month Estimate Invoices and must be present in those transactions.  
 This segment is not required in an 810 ESCO Summary Invoice.

REF~12~011231287654398

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Mand.</b>	<b>REF01</b>	<b>128</b>	<b>Reference Identification Qualifier</b>	<b>M ID 2/3</b>
			12 Billing Account	
			REF02 contains the Utility-assigned account number for the customer.	
<b>Must Use</b>	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b>	<b>X AN 1/30</b>
			Utility assigned customer account number	
			The utility account number must be supplied without intervening spaces or non-alphanumeric characters. (Characters added to aid in visible presentation on a bill, for example, should be removed)	

**Segment:** **REF** Reference Identification (Utility Account Number for the ESCO/~~Marketer~~)  
**Position:** 050  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Must Use)  
**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:** Required

This number is used as a reference number by the Utility and must be sent on all Invoice transactions.

This account number is used by the Utility to record all billing activity associated with a specific ESCO/~~Marketer~~. This is the number used to validate ESCO Summary Invoice transactions. To ensure proper posting of payments, this number should be included in all payment transactions transmitted to the Utility by the ESCO/~~Marketer~~.

REF~AJ~3134597

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	REF01	128	Reference Identification Qualifier	M ID 2/3
			AJ Accounts Receivable Customer Account	
			REF02 contains the Utility-assigned account number for the ESCO/ <del>Marketer</del> .	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Utility assigned account number for the ESCO/ <del>Marketer</del>	

<b>Segment:</b>	<b>N1</b> Name (ESCO/ <del>Marketer</del> )
<b>Position:</b>	070
<b>Loop:</b>	N1 Optional (Must Use)
<b>Level:</b>	Heading
<b>Usage:</b>	Optional (Must Use)
<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~24~123456789 N1~SJ~ESP COMPANY~24~123456789

#### Data Element Summary

<b>Mand.</b>	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
<b>Mand.</b>	<b>N101</b>	<b>98</b>	<b>Entity Identifier Code</b>	<b>M ID 2/3</b>
			SJ Service Provider	
			Identifies the ESCO/ <del>Marketer</del> participating in this transaction.	
<b>Optional</b>	<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/60</b>
			Free Form ESCO/ <del>Marketer</del> Company Name	
			Supplemental text information supplied, if desired, to provide "eyeball" identification of the ESCO/ <del>Marketer</del> . It is not necessary for successful completion of the transaction but may be provided by mutual agreement between trading partners.	
<b>Must Use</b>	<b>N103</b>	<b>66</b>	<b>Identification Code Qualifier</b>	<b>X ID 1/2</b>
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
			24 Employer's Identification Number	
			Federal Tax ID	
<b>Must Use</b>	<b>N104</b>	<b>67</b>	<b>Identification Code</b>	<b>X AN 2/80</b>
			The D-U-N-S number or the Federal Tax ID	

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

**Notes:** Required

N1~8S~~24~012345678

N1~8S~UTILITY COMPANY~24~912345678

#### Data Element Summary

Mand.	Ref. Des.	Data Element	Name	Attributes
Mand.	N101	98	Entity Identifier Code	M ID 2/3
			8S Consumer Service Provider (CSP)	
			Identifies the Utility participating in this transaction.	
Optional	N102	93	Name	X AN 1/60
			Free Form Utility Company Name	
			Supplemental text information supplied, if desired, to provide "eyeball" identification of the ESCO/ <del>Marketer</del> . It is not necessary for successful completion of the transaction but may be provided by mutual agreement between trading partners.	
Must Use	N103	66	Identification Code Qualifier	X ID 1/2
			1 D-U-N-S Number, Dun & Bradstreet	
			9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
			24 Employer's Identification Number	
			Federal Tax ID	
Must Use	N104	67	Identification Code	X AN 2/80
			The D-U-N-S number or the Federal Tax ID	

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

**Notes:** Conditional

EURC Cycle Invoice: Required  
 EURC Calendar Month Estimate: Required  
 ESCO Summary Invoice: Not Used

N1~8R~JOHN SMITH  
 N1~8R~DAIMLER-BENZ NA CORP

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Mand.</b>	<b>N101</b>	<b>98</b>	<b>Entity Identifier Code</b>	<b>M ID 2/3</b>
			8R	Consumer Service Provider (CSP) Customer
				REF02 contains the name of the end use customer targeted by this transaction.
<b>Must Use</b>	<b>N102</b>	<b>93</b>	<b>Name</b>	<b>X AN 1/60</b>
			Customer Name	

**Segment:** **ITD** Terms of Sale/Deferred Terms of Sale  
**Position:** 130  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**Max Use:** 1  
**Purpose:** To specify terms of sale  
**Syntax Notes:** 1 If ITD03 is present, then at least one of ITD04 ITD05 or ITD13 is required.  
 2 If ITD08 is present, then at least one of ITD04 ITD05 or ITD13 is required.  
 3 If ITD09 is present, then at least one of ITD10 or ITD11 is required.  
**Semantic Notes:** 1 ITD15 is the percentage applied to a base amount used to determine a late payment charge.  
**Comments:** 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.  
**Notes:** Conditional  
 EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required  
 This is the date payment is due on an 810 ESCO Summary Invoice  
 ITD~~~~~20060215

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	ITD06	446	Terms Net Due Date	O DT 8/8
			Payment due date for the invoice.	

**Segment:** **BAL** Balance Detail (Prior Balance)  
**Position:** 212  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**Max Use:** 1  
**Purpose:** To identify the specific monetary balances associated with a particular account  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**  
**Notes:**

Conditional  
  
 EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required  
  
 BAL~P~YB~500.55

#### Data Element Summary

	Ref.	Data			
	<u>Des.</u>	<u>Element</u>	<u>Name</u>		<u>Attributes</u>
Mand.	BAL01	951	Balance Type Code		M ID 1/2
			P	Previous Month	
Mand.	BAL02	522	Amount Qualifier Code		M ID 1/3
			YB	Actual Unpaid Principal Balance	
				Amount sent in Total Outstanding Balance segment of the previous ESCO Summary Invoice	
Mand.	BAL03	782	Monetary Amount		M R 1/18
				Amount of <del>E/MESCO</del> s balance from previous invoice before applying any payments/adjustments or current charges.	
				If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	



**Segment:** **BAL** Balance Detail (Total Payments and Refunds)  
**Position:** 212  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**Max Use:** 1  
**Purpose:** To identify the specific monetary balances associated with a particular account  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Notes:** Conditional

This segment is used to report the total amount of payments received from the ESCO ~~Marketer~~ and refunds applied to the ESCO ~~Marketer~~'s account since the last Summary Invoice was sent.

Each individual payment and/or refund will be sent in a PAM segment.

EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required

BAL~P~TP~450.56

#### Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	BAL01	951	Balance Type Code	M ID 1/2
			P Previous Month	
Mand.	BAL02	522	Amount Qualifier Code	M ID 1/3
			TP Total payment amount	
			Total payments and refunds	
Mand.	BAL03	782	Monetary Amount	M R 1/18
			Amount of Total Payments and Refunds	
			If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	

**Segment:** **BAL** Balance Detail (Beginning Balance)  
**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:** Conditional  
  
 EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required  
  
 The Beginning Balance is equal to the Prior Balance less Total Payments and Refunds  
  
 BAL~M~J9~49.99

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	BAL01	951	Balance Type Code	M ID 1/2
			M Current Month	
Mand.	BAL02	522	Amount Qualifier Code	M ID 1/3
			J9 Beginning Balance	
			This is the balance prior to this billing. If an ESCO/Marketer is paid in total, this will be zero.	
Mand.	BAL03	782	Monetary Amount	M R 1/18
			Amount of Beginning Balance	
			If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	

**Segment:** **BAL** Balance Detail (Total Outstanding Balance)  
**Position:** 212  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**Max Use:** 1  
**Purpose:** To identify the specific monetary balances associated with a particular account  
**Syntax Notes:**  
**Semantic Notes:**  
**Comments:**

**Notes:** Conditional

EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required

Total Outstanding Balance is equal to the Beginning Balance plus the amount sent in the TDS segment in this Invoice.

BAL~M~YB~248.74  
 BAL~M~YB~-150.00

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	BAL01	951	Balance Type Code	M ID 1/2
			M Current Month	
Mand.	BAL02	522	Amount Qualifier Code	M ID 1/3
			YB Actual Unpaid Principal Balance	
			The ESCO/ <del>Marketer</del> 's total outstanding balance. This is what the ESCO/ <del>Marketer</del> owes from previous billing periods plus the current billing period charges.	
Mand.	BAL03	782	Monetary Amount	M R 1/18
			Amount of ESCO/ <del>Marketer</del> 's total outstanding balance.	
			If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	

**Segment:** **PAM** Period Amount (Payment Posted or Refund Applied)  
**Position:** 214  
**Loop:**  
**Level:** Heading  
**Usage:** Optional (Dependent)  
**Max Use:** >1  
**Purpose:** To indicate a quantity, and/or amount for an identified period  
**Syntax Notes:**

- 1 If any of PAM01 PAM02 or PAM03 is present, then all are required.
- 2 At least one of PAM02 PAM05 or PAM14 is required.
- 3 If either PAM04 or PAM05 is present, then the other is required.
- 4 If either PAM06 or PAM07 is present, then the other is required.
- 5 If PAM07 is present, then at least one of PAM08 or PAM09 is required.
- 6 If PAM07 is present, then PAM06 is required.
- 7 If PAM08 is present, then PAM07 is required.
- 8 If PAM09 is present, then PAM07 is required.
- 9 If PAM10 is present, then at least one of PAM11 or PAM12 is required.
- 10 If PAM11 is present, then PAM10 is required.
- 11 If either PAM13 or PAM14 is present, then the other is required.

**Semantic Notes:**

- 1 PAM10, PAM11, or PAM12 are used when two dates are required.
- 2 PAM15 indicates whether the monetary amount identified in PAM05 is a net or gross value. A "Y" indicates amount is a gross value; an "N" indicates amount is a net value.

**Comments:**

**Notes:** Conditional

EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required if payments are received or refunds are applied

This segment is used to report payments that are received from the ESCO/~~Marketer~~ for previous Summary Invoices and/or refunds that may result from posting entries to the ESCO/~~Marketer~~'s account that result in a credit balance.

PAM~~~QZ~100.00~PD~009~20020719 (Payment)  
 PAM~~~BAR~-50.00~PD~009~20020719 (Refund)

#### Data Element Summary

Ref.	Des.	Data Element	Name	Attributes
Must Use	PAM04	522	Amount Qualifier Code	X ID 1/3
Used to differentiate between a payment and a refund.				
			BAR	Amount to be Refunded
				The Refund code is only used when the utility has also made a financial transaction to transfer money to the ESCO/ <del>Marketer</del> (such as cutting a check for an overpayment). Refunds will show in the PAM segment as a negative amount.
			QZ	Payment Amount
Must Use	PAM05	782	Monetary Amount	X R 1/18
Amount paid (typically positive) or refunded (typically negative).				
If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.				

<b>Must Use</b>	<b>PAM06</b>	<b>344</b>	<b>Unit of Time Period or Interval</b>	<b>X</b>	<b>ID 2/2</b>
			PD Period to Date		
<b>Must Use</b>	<b>PAM07</b>	<b>374</b>	<b>Date/Time Qualifier</b>	<b>X</b>	<b>ID 3/3</b>
			009 Process		
<b>Must Use</b>	<b>PAM08</b>	<b>373</b>	<b>Date</b>	<b>X</b>	<b>DT 8/8</b>
			Date the payment was posted or the refund was applied.		

**Segment:** **IT1** **Baseline Item Data (Charge Level)**  
**Position:** 010  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Must Use)  
**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

The IT109 element in this segment is used to differentiate the "type" of loop that is present. Please read each type below to determine which type is applicable.

EURC Cycle Invoice - Sent at the "ACCOUNT" and/or "RATE" level.

EURC Calendar Month Estimate - Sent at the "ACCOUNT" level.

ESCO Summary Invoice - Sent at the "ACCOUNT" and/or "GASPOOL" level.

For example, [National Fuel Gas specified in its Utility Maintained EDI Guide, a utility that supports Single Retailer](#) will send one IT1 Loop for each Gas Pool and one IT1 Loop for all Account level charges.

**ACCOUNT:** Charges/taxes are applicable to the entire account. There may be only one account loop in each Invoice transaction.

EURC Cycle Invoice:	Required
EURC Calendar Month Estimate:	Required
ESCO Summary Invoice:	Required

**RATE:** Charges/taxes are applicable at a utility rate class level. One IT1 Loop will be provided for each rate (the rate class will be identified in the REF~NH segment).

EURC Cycle Invoice:	Not Used at this time
EURC Calendar Month Estimate:	Not Used at this time
ESCO Summary Invoice:	Not Used at this time

**GAS POOL ID:** Charges/taxes are applicable at a Gas Pool ID level. One IT1 Loop will be sent for each Gas Pool ID (the Gas Pool ID is sent in the REF~VI segment).

EURC Cycle Invoice: Not Used  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Required

IT1~1~~~~SV~GAS~C3~ACCOUNT

#### Data Element Summary

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>Attributes</b>
<b>Must Use</b>	<b>IT101</b>	<b>350</b>	<b>Assigned Identification</b>	<b>O AN 1/20</b>
			A sequential line item counter used to differentiate between IT1 loops in a transaction.	
<b>Must Use</b>	<b>IT106</b>	<b>235</b>	<b>Product/Service ID Qualifier</b>	<b>X ID 2/2</b>
			SV Service Rendered	
<b>Must Use</b>	<b>IT107</b>	<b>234</b>	<b>Product/Service ID</b>	<b>X AN 1/48</b>
			There may be only one commodity (Electric or Gas) for each EURC 810 Invoice transaction. The code "BOTH" may be sent in an 810 ESCO Summary Invoice.	
			BOTH Both Services (used only in ESCO Summary Invoice)	
			EL Electric Service	
			GAS Gas Service	
<b>Must Use</b>	<b>IT108</b>	<b>235</b>	<b>Product/Service ID Qualifier</b>	<b>X ID 2/2</b>
			C3 Classification	
<b>Must Use</b>	<b>IT109</b>	<b>234</b>	<b>Product/Service ID</b>	<b>X AN 1/48</b>
			ACCOUNT Charges/Taxes at an Account Level	
			GASPOOL Charges/Taxes at a Gas Pool ID Level	
			RATE Charges/Taxes at a Rate Level	

**Segment:** **TXI** Tax Information  
**Position:** 040  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Dependent)  
**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:** Required when taxes have been applied at the level defined in IT109.

TXI~LS~12.00~.06~~~~A~200

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Mand.</b>	<b>TXI01</b>	<b>963</b>	<b>Tax Type Code</b>	<b>M ID 2/2</b>
			GR Gross Receipts Tax	
			LS State and Local Sales Tax	
			PG State or Provincial Tax on Goods	
			Gas Import Tax	
			SC School Tax	
<b>Must Use</b>	<b>TXI02</b>	<b>782</b>	<b>Monetary Amount</b>	<b>X R 1/18</b>
			Calculated Tax Amount.	
			If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	
<b>Optional</b>	<b>TXI03</b>	<b>954</b>	<b>Percent</b>	<b>X R 1/10</b>
			Percent or Rate presented as a decimal, e.g., 6% will be expressed as .06	
			If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	
<b>Must Use</b>	<b>TXI07</b>	<b>662</b>	<b>Relationship Code</b>	<b>O ID 1/1</b>
			A Add	
			The amount in the TXI02 is included when summing the invoice total in TDS01. "A" may also be used when correcting previously reported amounts where a credit amount appears in TXI02.	
			O Information Only	
			The amount in the TXI02 is ignored when summing the invoice total in TDS01.	
<b>Optional</b>	<b>TXI08</b>	<b>828</b>	<b>Dollar Basis For Percent</b>	<b>O R 1/9</b>
			Dollar amount or volume that the percentage in TXI03 is being applied against to determine the total tax in TXI02.	
			The amount sent in TXI08 multiplied by the percent in TXI03 should equal the calculated tax amount sent in TXI02. If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	



**Segment:** **REF** Reference Identification (Bill Cycle)  
**Position:** 120  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Dependent)  
**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:** Conditional  
 EURC Cycle Invoice: Required  
 EURC Calendar Month Estimate: Not Used  
 ESCO Summary Invoice: Not Used  
 REF~BF~12

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	REF01	128	Reference Identification Qualifier	M ID 2/3
			BF	Billing Center Identification
			Bill Cycle	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Bill Cycle	

**Segment:** **REF** Reference Identification (Utility Rate Service Class)  
**Position:** 120  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Dependent)  
**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:** Conditional

EURC Cycle Invoice: Required  
 EURC Calendar Month Estimate: Required  
 ESCO Summary Invoice: Not Used

REF~NH~RS1

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	REF01	128	Reference Identification Qualifier NH Rate Card Number REF02 contains the Utility specific rate code that references the service class and rates applicable to this service delivery point.	M ID 2/3
Must Use	REF02	127	Reference Identification Utility Rate Service Class code as found in the tariff. (This code can be used to retrieve rates from a utility's web site.)	X AN 1/30

**Segment:** **REF** Reference Identification (Utility Rate Subclass)  
**Position:** 120  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Dependent)  
**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:** Conditional

EURC Cycle Invoice: Required if applicable  
 EURC Calendar Month Estimate: Required if applicable  
 ESCO Summary Invoice: Not Used  
 REF~PR~RSHT

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	REF01	128	Reference Identification Qualifier	M ID 2/3
			PR Price Quote Number	
			Utility Rate Subclass	
Must Use	REF02	127	Reference Identification	X AN 1/30
			Utility Rate Subclass, which provides further classification of a tariff specified in the REF where REF01=NH.	

**Segment:** **REF** Reference Identification (Gas Pool ID)  
**Position:** 120  
**Loop:** IT1 Optional (Must Use)  
**Level:** Detail  
**Usage:** Optional (Dependent)  
**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:** Conditional

EURC Cycle Invoice: Optional  
 EURC Calendar Month Estimate: Optional  
 ESCO Summary Invoice: Required when IT109=GASPOOL.  
 REF~VI~123456789

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	REF01	128	Reference Identification Qualifier VI Pool Number Gas Pool ID's are assigned to a gas marketer by the Utility and are used to define a unique sub-grouping of customers.	M ID 2/3
Must Use	REF02	127	Reference Identification Gas Pool ID associated with the charges in the IT1 loop	X AN 1/30

<b>Segment:</b>	<b>DTM</b> Date/Time Reference (Period Start Date)
<b>Position:</b>	150
<b>Loop:</b>	IT1 Optional (Must Use)
<b>Level:</b>	Detail
<b>Usage:</b>	Optional (Dependent)
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify pertinent dates and times
<b>Syntax Notes:</b>	<b>1</b> At least one of DTM02 DTM03 or DTM05 is required. <b>2</b> If DTM04 is present, then DTM03 is required. <b>3</b> If either DTM05 or DTM06 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Conditional  EURC Cycle Invoice: Required Note: The period start date in the 810 must match the earliest period start date indicated in the QTY loop(s) of the corresponding 867.  EURC Calendar Month Estimate: Required Note: The period start date in the 810 will be the first day of the month.  ESCO Summary Invoice: Optional  DTM~150~20060106

Data Element Summary				
	Ref. Des.	Data Element	Name	Attributes
Mand.	DTM01	374	Date/Time Qualifier	M ID 3/3
			150 Service Period Start	
Must Use	DTM02	373	Date	X DT 8/8
			Date in CCYYMMDD format.	

<b>Segment:</b>	<b>DTM</b> Date/Time Reference (Period End Date)
<b>Position:</b>	150
<b>Loop:</b>	IT1 Optional (Must Use)
<b>Level:</b>	Detail
<b>Usage:</b>	Optional (Dependent)
<b>Max Use:</b>	1
<b>Purpose:</b>	To specify pertinent dates and times
<b>Syntax Notes:</b>	<b>1</b> At least one of DTM02 DTM03 or DTM05 is required. <b>2</b> If DTM04 is present, then DTM03 is required. <b>3</b> If either DTM05 or DTM06 is present, then the other is required.
<b>Semantic Notes:</b>	
<b>Comments:</b>	
<b>Notes:</b>	Conditional  EURC Cycle Invoice: Required Note: The period end date in the 810 must match the latest period end date indicated in the QTY loop(s) of the corresponding 867.  EURC Calendar Month Estimate: Required Note: The period end date in the 810 will be the last day of the month.  ESCO Summary Invoice: Optional  DTM~151~20060204

Data Element Summary				
	Ref. Des.	Data Element	Name	Attributes
Mand.	DTM01	374	Date/Time Qualifier	M ID 3/3
			151 Service Period End	
Must Use	DTM02	373	Date	X DT 8/8
			Date in CCYYMMDD format.	

<b>Segment:</b>	<b>SLN Subline Item Detail (Item Counter)</b>
<b>Position:</b>	200
<b>Loop:</b>	SLN Optional (Dependent)
<b>Level:</b>	Detail
<b>Usage:</b>	Optional (Dependent)
<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>	<p>Conditional</p> <p>All charge data with the exception of tax information is sent in an SLN loop which contains two segments - an SLN and an SAC segment. It is not necessary to send an SLN loop when tax information is the only information being sent for a specific level (ACCOUNT, RATE OR GASPOOL). The SLN segment, however, must be sent when charge data is being sent in an SAC segment. Multiple charges require multiple SLN loops. The SLN segment is used as a sequential loop 'counter' to order the SAC segments sent in an 810 transaction.</p> <p>SLN~1~~A Followed by an SAC segment SLN~2~~A Followed by the next SAC segment, etc.</p>
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#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Attributes</u>
	<u>Des.</u>	<u>Element</u> <u>Name</u>	
<b>Mand.</b>	<b>SLN01</b>	<b>350 Assigned Identification</b>	<b>M AN 1/20</b>
This element is a sequential item counter and is a number denoting the placement of this SLN loop in a transaction i.e. 1=this is the first SLN loop, 2=this is the second SLN loop, etc.			

<b>Mand.</b>	<b>SLN03</b>	<b>662</b>	<b>Relationship Code</b>	<b>M</b>	<b>ID 1/1</b>
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The relationship code always equals 'A'. This data element is required by X12 when the SLN segment is used. (Note: An 'A' in SLN03 is NOT used to indicate if a charge in the SAC will be included or excluded in the TDS. Instead, the code in SAC01 is used to communicate the disposition of charges.)

A	Add
---	-----



**Segment:** **DTM** **Date/Time Reference (Process Date)**  
**Position:** 205  
**Loop:** SLN Optional (Dependent)  
**Level:** Detail  
**Usage:** Optional (Dependent)  
**Max Use:** 1  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:** 1 At least one of DTM02 DTM03 or DTM05 is required.  
 2 If DTM04 is present, then DTM03 is required.  
 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

**Notes:**

Conditional

This segment will be sent to provide the date an adjustment identified in the SAC segment was applied to the account of an EURC or to the ESCO/~~Marketer~~'s account.

EURC Cycle Invoice: Optional  
 EURC Calendar Month Estimate: Optional  
 ESCO Summary Invoice: Optional

DTM~009~20060204

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Mand.</b>	<b>DTM01</b>	<b>374</b>	<b>Date/Time Qualifier</b>	<b>M ID 3/3</b>
			009 Process	
			Date that adjustment was applied.	
<b>Must Use</b>	<b>DTM02</b>	<b>373</b>	<b>Date</b>	<b>X DT 8/8</b>
			Date in CCYYMMDD format.	

<b>Segment:</b>	<b>SAC</b> Service, Promotion, Allowance, or Charge Information (Charges/Adjustments)
<b>Position:</b>	230
<b>Loop:</b>	SLN Optional (Dependent)
<b>Level:</b>	Detail
<b>Usage:</b>	Optional (Dependent)
<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>
<b>Notes:</b>	<p>Conditional</p> <p>This segment is required when transmitting charge data other than tax information. The SAC segment is used to describe a specific charge/allowance item. In the Single Retailer Model, SAC04 will be used to generally categorize charges, credits, etc. and the SAC15, will be used to more a more detailed description of the actual charge, credit, etc.</p> <p>SAC~C~EU~BAS001~601~.2733~DA~22~Basic Service: 22 days@ \$.2733  SAC~C~EU~BAS001~1851~.19084~TD~97~NEXT 97 THERMS  (Prorated Example)</p>

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
<b>Mand.</b>	<b>SAC01</b>	<b>248</b>	<b>Allowance or Charge Indicator</b>	<b>M ID 1/1</b>
			C	Charge
			N	No Allowance or Charge

The amount sent in the SAC05 element is ignored when summing the invoice total in the TDS01 element.

<b>Must Use</b>	<b>SAC03</b>	<b>559</b>	<b>Agency Qualifier Code</b>	<b>X</b>	<b>ID 2/2</b>
			EU	Electric Utilities	
				Used for electric and combination utilities.	
			GU	Natural Gas Utilities	
				Used for gas utilities.	
<b>Must Use</b>	<b>SAC04</b>	<b>1301</b>	<b>Agency Service, Promotion, Allowance, or Charge Code</b>	<b>X</b>	<b>AN 1/10</b>
			ADJ002	Adjustment	
			BAS001	Customer Charge	
			BAS002	Special Billing Charge	
			CRE001	Credit	
			DIS002	Gas Delivery Charge	
			DIS005	Total Invoiced Distribution Charge	
				The total EURC charges	
			DMD001	Demand Charge (Electric)	
			DMD002	Contract Demand Charge	
			DMD024	Summer Demand	
			DMD025	Winter Demand	
			DMD028	Demand Charge (Gas)	
				This is a charge for gas being held in reserve for the end use customer (a.k.a. Stand-by Charge) This charge is assessed regardless of actual usage.	
			DMD029	Shoulder Demand	
			DMD030	Stand-by Sales	
				Total charges for the volume of gas actually purchased by the marketer for customers on a stand-by rate. This relates to DMD028.	
			DMD031	Daily Demand Charge	
				Daily as used demand for customers with interval metering shall be the daily maximum metered demand during on peak hours.	
			DSC001	Discount	
			ENC001	Energy Charge	
			ENC002	Energy Tier Charge	
			ENC003	Off Peak Energy Charge	
			ENC039	On Peak Energy Charge	
			ENC042	Shoulder Energy Charge	
			FAC001	Equipment and Service Charge	
			FFR001	Non-metered service (other than lights)	
			IBC020	City Gate Imbalance	
				GAS ONLY: Total city gate imbalance charges based on the volume of gas purchased to correct an imbalance situation.	
			LPC001	Late Payment Charge	
				EURC Cycle Invoice: Not Used	
				EURC Calendar Month Estimate: Not Used	
				ESCO Summary Invoice: Optional	
			MAD001	Minimum Bill	
			MAD004	Minimum Demand Charge	
			MSC001	Miscellaneous Charge	
			MSC016	Storage Procurement Charge or Credit	
			MSC017	Storage Transmission Charge, Credit or Adjustment	
			MSC024	Public Purpose Program	

			MSC037	System Benefits Charge	
				Weather Normalization Charge or Credit	
				A charge or credit based on actual degree days in the billing period compared to normal temperatures for that period.	
			MSC038	Take or Pay Charge	
				GAS ONLY: This is a provision in natural gas sales contracts which requires a purchaser to take, or if not taken, to pay for a certain quantity of pipeline capacity.	
			MSC039	Balancing Services Charge	
				GAS ONLY: Charge for providing balancing services	
			ODL002	Street Lighting	
			ODL003	Traffic Signals	
			RES001	Core Subscription Reservation Charge	
				GAS ONLY: Total charges related to the release of upstream pipeline capacity for use by marketer.	
			SER003	Customer Switching Charge	
			SUR008	Interstate Transition Cost Surcharge	
				GAS ONLY: Total transition charges calculated for an EURC Account. These charges are separate from transportation charges. They represent upstream pipeline costs that occur as part of implementing FERC Order 636.	
			TRS001	Transfer from Account to Account	
				Monetary funds applied to an account by transferring from another account	
<b>Must Use</b>	<b>SAC05</b>	<b>610</b>	<b>Amount</b>	<b>O N2 1/15</b>	
				Charge, credit or adjustment amount.	
				If negative, this amount must be preceded by a negative sign. Note that this is an implied decimal field; do NOT send the decimal point.	
				Typically, the amount sent in SAC08 multiplied by the amount sent in SAC10 will equal the SAC05 amount.	
<b>Cond.</b>	<b>SAC08</b>	<b>118</b>	<b>Rate</b>	<b>O R 1/9</b>	
				If the SAC08, SAC09 or SAC10 are populated, all three must be populated.	
				Typically, the SAC08 multiplied by the SAC10 would equal the SAC05. However, in certain situations, SAC08 multiplied by SAC10 will not equal SAC05. For example, when charge amounts are sent for prorated periods they may not equal, or when the minimum demand is higher than peak demand for the reported period.	
				If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.	

<b>Cond.</b>	<b>SAC09</b>	<b>355</b>	<b>Unit or Basis for Measurement Code</b>	<b>X</b>	<b>ID 2/2</b>
If the SAC08, SAC09 or SAC10 are populated, all three must be populated.					
			DA	Days	
			EA	Each	
			HH	Hundred Cubic Feet	
				Ccf	
			K1	Kilowatt Demand	
			K2	Kilovolt Amperes Reactive Demand	
			K3	Kilovolt Amperes Reactive Hour	
			K4	Kilovolt Amperes	
			K5	Kilovolt Amperes Reactive	
			K7	Kilowatt	
			KH	Kilowatt Hour	
			MO	Months	
			TD	Therms	
			TZ	Thousand Cubic Feet	
			YR	Years	
<b>Cond.</b>	<b>SAC10</b>	<b>380</b>	<b>Quantity</b>	<b>X</b>	<b>R 1/15</b>
Consumption or Quantity					
If the SAC08, SAC09 or SAC10 are populated, all three must be populated.					
Typically, the SAC08 multiplied by the SAC10 would equal the SAC05. However, in certain situations, SAC08 multiplied by SAC10 will not equal SAC05. For example, when charge amounts are sent for prorated periods they may not equal, or when the minimum demand is higher than peak demand for the reported period.					
If negative, this amount must be preceded by a negative sign. If a decimal point is needed, the decimal point is not implied and must be sent in the transaction.					
<b>Must Use</b>	<b>SAC15</b>	<b>352</b>	<b>Description</b>	<b>X</b>	<b>AN 1/80</b>
More detailed text description for the amount sent in SAC05.					

<b>Segment:</b>	<b>TDS</b> Total Monetary Value Summary
<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>	<p>Required</p> <p>The TDS segment is used to transmit the sum of the charge(s) sent in SAC05 elements plus the tax amounts sent in TXI02 elements in this invoice EXCLUDING amounts sent in SAC05 that were coded as "N" in the SAC01 element OR amounts sent in TXI02 that were coded as "O" in the TXI07 element.</p> <p>TDS~19875 The sum of the charges/taxes in this invoice is \$198.75.</p>

#### Data Element Summary

<b>Ref.</b>	<b>Data</b>	<b>Name</b>	<b>Attributes</b>
<b>Des.</b>	<b>Element</b>	<b>Amount</b>	
<b>Mand.</b>	<b>TDS01</b>	<b>610</b>	<b>M N2 1/15</b>
The total of amounts to be billed contained in this invoice.			
If negative, this amount must be preceded by a negative sign. Note that this is an implied decimal field, do NOT send the decimal point.			

**Segment:** **CTT** Transaction Totals  
**Position:** 070  
**Loop:**  
**Level:** Summary  
**Usage:** Optional (Must Use)  
**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>
Mand.	CTT01	354	Number of Line Items	M N0 1/6
The number of IT1 segments in this invoice.				

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

**Notes:** Required

SE~35~000000001

#### Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Mand.	SE01	96	Number of Included Segments	M N0 1/10
Mand.	SE02	329	Transaction Set Control Number	M AN 4/9



## EXAMPLES

These examples are presented for illustrative purposes. Although they are syntactically correct with respect to the published transaction standard for the TS810 Single Retailer Invoice, it should be understood that these examples reflect certain assumptions regarding optional and conditional data segments in this standard and therefore, may not be an accurate reflection of the content of a transaction transmitted by a specific utility. It should also be noted that the dollar amounts and/or rates for charges and taxes in each scenario are purely hypothetical and were not intended to be representative of the actual charges or rates that may be assessed by a specific utility.

### ***Scenario 1: EURC Cycle Invoice, EURC Calendar Month Estimate, ESCO Summary Invoice*** ***Part A: Cycle Invoice at Account level***

ST*810*000001!	Transaction Set header; transaction defined is an <b>810</b> ; control number assigned by originator
BIG*20060315*20060315CI0001***86704013**ME*00!	Transaction date; Invoice number; Cross Reference Number; <b>Cycle Invoice</b> ; <b>Original Invoice</b>
REF*12*3456789!	Utility assigned account number for the customer
REF*AJ*8887987!	Utility assigned account number for the <a href="#">E/MESCO</a>
N1*SJ* <a href="#">E/MESCO</a> NAME*1*123456789!	<a href="#">E/MESCO</a> Name and DUNS number
N1*8S*NATIONAL FUEL*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas Charge(s) billed at the <b>account</b> level
TXI*LS*9.72*.035****A*277.71!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*GR*11.8*.0443759****A*265.92!	Gross Receipts Tax
REF*BF*20!	Bill Cycle
REF*NH*13M-1!	Utility Rate Class
REF*PR*21708!	Utility Rate Subclass
REF*VI*100202!	Gas Pool
DTM*150*20060215!	Service period <b>start</b> date
DTM*151*20060314!	Service period <b>end</b> date
SLN*1**A!	First SLN Segment
SAC*C**GU*DIS002*24089***.2311804*HH*1042* ****GAS DELIVERY CHARGE (TRANSP. ONLY)!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Gas Delivery Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**GU*SUR008*1126***.0108061*HH*1042* ****INTERSTATE TRANSITION COSTS (TRAN CHARGE)!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Interstate Transition Cost Surcharge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment
SAC*C**GU*MSC037*2246***.02155451*HH*1042 *****WEATHER NORMALIZATION CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Weather Normalization Charge or Credit</b> ; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*4**A!	Fourth SLN Segment
SAC*C**GU*MSC037*-869***-.0083397*HH*10 42*****TAKE OR PAY CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Take or Pay Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*28744!	Total charges
CTT*1!	Number of IT1 segments
SE*27*000001!	Transaction Set trailer; segment count; control number

**Scenario 2: EURC Cycle Invoice, EURC Calendar Month Estimate, ESCO Summary Invoice**  
**Part B: EURC Calendar Month Estimate Invoice**

ST*810*000001!	Transaction Set header; transaction defined is an <b>810</b> ; control number assigned by originator
BIG*20060401*20060401CME000413**0882*123456**EM*00!	Transaction date; Invoice number; Estimate to Summary link; <b>Calendar Month Estimate</b> ; Cross Reference Number, <b>Original</b> Invoice
REF*12*3456789!	Utility assigned account number for the customer
REF*AJ*8887987!	Utility assigned account number for the <b>E/MESCO</b>
N1*SJ* <b>E/MESCO</b> NAME*1*123456789!	<b>E/MESCO</b> Name and DUNS number
N1*8S*NATIONAL FUEL*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas Charge(s) billed at the <b>account</b> level
TXI*LS*9.81*.035****A*280.4!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*GR*11.91*.0443717****A*268.49!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
REF*NH*13M-1!	Utility Rate Class
REF*PR*21708!	Utility Rate Subclass
REF*VI*100202!	Gas Pool
DTM*150*20060301!	Service period <b>start</b> date
DTM*151*20060331!	Service period <b>end</b> date
SLN*1**A!	First SLN Segment
SAC*C**GU*DIS002*23616***.2361598*HH*1000*****GAS DELIVERY CHARGE (TRANSP. ONLY)!	<b>Charge</b> Indicator, <b>gas utility</b> ; charge type is <b>Gas Delivery Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**GU*SUR008*938***.009384*HH*1000*****INTERSTATE TRANSITION COSTS (TRAN CHARGE)!	<b>Charge</b> Indicator, <b>gas utility</b> ; charge type is <b>Interstate Transition Cost Surcharge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment
SAC*C**GU*MSC037*3129***.0312884*HH*1000*****WEATHER NORMALIZATION CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Weather Normalization Charge or Credit</b> ; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*4**A!	Fourth SLN Segment
SAC*C**GU*MSC037*-834***-.0083355*HH*1000*****TAKE OR PAY CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Take or Pay Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*29012!	Total charges
CTT*1!	Number of IT1 segments
SE*26*000001!	Transaction Set trailer; segment count; control number

**Scenario 2: EURC Cycle Invoice, EURC Calendar Month Estimate, ESCO Summary Invoice**  
**Part C: ESCO Summary Invoice**

ST*810*000001!	Transaction Set header; transaction defined is an <b>810</b> ; control number assigned by originator
BIG*20060402*20060402ESI003**0882***CI*00!	Transaction date; Invoice number; Estimate to Summary link; <b>ESCO Summary Invoice</b> ; <b>Original Invoice</b>
REF*AJ*8887987!	Utility assigned account number for the <b>E/MESCO</b>
N1*SJ* <b>E/MESCO</b> NAME*1*123456789!	<b>E/MESCO</b> Name and DUNS number
N1*8S*NATIONAL FUEL*1*987693210!	Utility Name and DUNS number
ITD*****20060420!	Payment Due Date for the invoice
BAL*P*YB*51039.1!	Prior Balance
BAL*P*TP*51039.1!	Total Payments and Refunds
BAL*M*J9*500!	Beginning Balance
BAL*M*YB*49997.05!	Total Outstanding Balance
PAM****QZ*25050.29*PD*009*20060328!	Payment
PAM****QZ*25488.81*PD*009*20060329!	Payment
<b>IT1*1*****SV*GAS*C3*ACCOUNT!</b>	Gas Charge(s) billed at the <b>account</b> level
TXI*LS*.62*.08*****A*7.75!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*GR*.25*.033592*****A*7.50!	Gross Receipts tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
SLN*1**A!	First SLN Segment of this IT1 Loop
SAC*C**GU*LPC001*750***.015*MO*500*** **LATE PAYMENT CHARGE!	<b>Charge</b> Indicator, <b>gas utility</b> ; charge type is <b>Late Payment Charge</b> ; Amount; Text Description
<b>IT1*2*****SV*GAS*C3*GASPOOL!</b>	Gas Charge(s) billed at the <b>gas pool</b> level
TXI*LS*.66.78*.08*****A*834.75!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*GR*.27.13*.033592*****A*807.62!	Gross Receipts tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*PG*.6292.8*.0684*****A*92000!	Gas Import tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
REF*VI*100202!	Gas Pool
DTM*150*20060301!	Service period <b>start</b> date
DTM*151*20060331!	Service period <b>end</b> date
SLN*1**A!	First SLN Segment of this IT1 Loop
SAC*C**GU*DIS005*2352892*****TOT AL DISTRIBUTION CHARGES!	<b>Charge</b> Indicator, <b>gas utility</b> ; charge type is <b>Total Invoiced Distribution Charges</b> ; Amount; Text Description
SLN*2**A!	Second SLN Segment of this IT1 Loop
SAC*C**GU*IBC020*80762*****DEFICI ENCY IMBALANCE CHARGE!	<b>Charge</b> Indicator, <b>gas utility</b> ; charge type is <b>City Gate Imbalance Charge</b> ; Amount; Text Description
<b>IT1*3*****SV*GAS*C3*GASPOOL!</b>	Gas Charge(s) billed at the <b>gas pool</b> level
REF*VI*102408!	Gas Pool
DTM*150*20060301!	Service period <b>start</b> date
DTM*151*20060331!	Service period <b>end</b> date

SLN*1**A!	First SLN Segment of this IT1 Loop
SAC*C**GU*DIS005*1876543*****TOT AL DISTRIBUTION CHARGES!	<b>Charge</b> Indicator, <i>gas utility</i> ; charge type is <b>Total Invoiced Distribution Charges</b> ; Amount; Text Description
TDS*4949705!	Total charges
CTT*3!	Number of IT1 segments
SE*37*000001!	Transaction Set trailer; segment count; control number

### Scenario 3: EURC Cancel Cycle Invoice

ST*810*000001!	Transaction Set header; transaction defined is an <b>810</b> ; control number assigned by originator
BIG*20060317*20060315CI0001C***86704013* *ME*01!	Transaction date; Invoice number; Cross Reference Number; <b>Cycle Invoice</b> ; <b>Cancel Invoice</b>
REF*OI*20060315CI0001!	Original Invoice Number
REF*12*3456789!	Utility assigned account number for the customer
REF*AJ*8887987!	Utility assigned account number for the <b>E/MESCO</b>
N1*SJ* <b>E/MESCO</b> NAME*1*123456789!	<b>E/MESCO</b> Name and DUNS number
N1*8S*NATIONAL FUEL*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas Charge(s) billed at the <b>Account</b> level
TXI*LS*9.72*.035*****A*277.71!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*GR*11.8*.0443759*****A*265.92!	Gross Receipts Tax
REF*BF*20!	Bill Cycle
REF*NH*13M-1!	Utility Rate Class
REF*PR*21708!	Utility Rate Subclass
REF*VI*100202!	Gas Pool
DTM*150*20060215!	Service period <b>start</b> date
DTM*151*20060314!	Service period <b>end</b> date
SLN*1**A!	First SLN Segment
SAC*C**GU*DIS002*24089***.2311804*HH*1 042*****GAS DELIVERY CHARGE (TRANSP. ONLY)!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Gas Delivery Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**GU*SUR008*1126***.0108061*HH*10 42*****INTERSTATE TRANSITION COSTS (TRAN CHARGE)!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Interstate Transition Cost Surcharge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment
SAC*C**GU*MSC037*2246***.02155451*HH* 1042*****WEATHER NORMALIZATION CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Weather Normalization Charge or Credit</b> ; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*4**A!	Fourth SLN Segment
SAC*C**GU*MSC037*-869***- .0083397*HH*10 42*****TAKE OR PAY CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Take or Pay Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*28744!	Total charges
CTT*1!	Number of IT1 segments
SE*28*000001!	Transaction Set trailer; segment count; control number

### Scenario 4: EURC Cycle Invoice with Final Bill Indicator

ST*810*000001!	Transaction Set header; transaction defined is an <b>810</b> ; control number assigned by originator
BIG*20060315*20060315CI0001***86704013**FE*00!	Transaction date; Invoice number; Cross Reference Number; <b>Final Cycle Invoice</b> ; <b>Original</b> Invoice
REF*12*3456789!	Utility assigned account number for the customer
REF*AJ*8887987!	Utility assigned account number for the <b>E/MESCO</b>
N1*SJ* <b>E/MESCO</b> NAME*1*123456789!	<b>E/MESCO</b> Name and DUNS number
N1*8S*NATIONAL FUEL*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas Charge(s) billed at the <b>account</b> level
TXI*LS*9.72*.035*****A*277.71!	Sales tax; amount; rate; Tax is <b>Additive</b> ; basis on which the tax is calculated
TXI*GR*11.8*.0443759****A*265.92!	Gross Receipts Tax
REF*BF*20!	Bill Cycle
REF*NH*13M-1!	Utility Rate Class
REF*PR*21708!	Utility Rate Subclass
REF*VI*100202!	Gas Pool
DTM*150*20060215!	Service period <b>start</b> date
DTM*151*20060314!	Service period <b>end</b> date
SLN*1**A!	First SLN Segment
SAC*C**GU*DIS002*24089***.2311804*HH*1042*****GAS DELIVERY CHARGE (TRANSP. ONLY)!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Gas Delivery Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**GU*SUR008*1126***.0108061*HH*1042*****INTERSTATE TRANSITION COSTS (TRAN CHARGE)!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Interstate Transition Cost Surcharge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment
SAC*C**GU*MSC037*2246***.02155451*HH*1042*****WEATHER NORMALIZATION CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Weather Normalization Charge or Credit</b> ; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*4**A!	Fourth SLN Segment
SAC*C**GU*MSC037*-869***-.0083397*HH*1042*****TAKE OR PAY CHARGE!	<b>Charge</b> Indicator; <b>gas utility</b> ; charge type is <b>Take or Pay Charge</b> ; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*28744!	Total charges
CTT*1!	Number of IT1 segments
SE*27*000001!	Transaction Set trailer; segment count; control number