98-M-0667
Supplement I1

New York Implementation Standard

For

Standard Electronic Transactions

TRANSACTION SET

810 Invoice

Utility Rate Ready Billing

Ver/Rel 004010

April 30, 2018
Version 1.6

		Summary of Changes
June 21, 2002		**Initial Release**
February 21, 2003		**Version 1.1 Issued**
		Modified Front Matter Notes to indicate that the SAC08, SAC09 and SAC10 elements are required in an 810 Original Invoice but are not required in an 810 Cancel transaction. They may be sent in Cancel transactions at the discretion of the billing party.
		Modified usage attributes for the SAC08, SAC09 and SAC10 elements in the SAC segment from “Must Use” to “Cond” and modified the gray box notes for SAC08 and SAC10 accordingly.
		A gray box note is added to the SAC09 element to clarify its usage attribute. It is required in an Original Invoice and may be sent in a Cancel transaction at the discretion of the billing party.
		Revised the presentation of Front Matter Notes to minimize page breaks within sections and align the material in the order the segments/elements are presented in the Table of Contents.
July 19, 2006		**Version 1.2 Issued**
		A new code (GR) is added to the TXI01 element in the TXI segment (Tax Information) to enable utilities issuing rate ready consolidated bills to differentiate between gross receipts tax and sales tax in an 810 Invoice transaction.
		The code for sales tax in the TXI01 element in the TXI segment (Tax Information) is changed from "SL" to "LS" to be consistent with the code used for sales tax in an 810 Invoice transaction used in the Bill Ready consolidated billing model.
		Corrected the sales tax code in the Examples and updated all date segments in the Examples and segment notes to 2006.
April 7, 2015		**Version 1.3 Issued**
		• Utility specific notes are generalized, as appropriate, and designated for relocation to/reference within Utility Maintained EDI Guides, as necessary. • Replaced references to Marketer and E/M with ESCO. • Changes to accommodate bill credits to Assistance Program Participants.
January 29, 2016		**Version 1.4 Issued**
		Added Rate Ready Examples with and without APP Credits.

June 30, 2016		**Version 1.5 Issued**
		• Existing references to APP Credits are changed to EPA (ESCO Pricing Adjustment) Credits; the APP Credit is one type of an EPA Credit. • Modifications to clarify EPA Credits and adjustments to EPA Credits are to be submitted as real numbers. • Update to conditionality of REF Reference Identification (Previous Utility Customer Account Number) segment.
April 30, 2018		**Version 1.6 Issued**
		• Existing references to EPA Credits are changed to GSP (Guaranteed Savings Program) Credits; the GSP Credit is one type of an EPA Credit.

		Notes pertaining to the use of this document
Purpose		• This 810 Rate Ready Invoice Transaction Set is used to transmit a Billing Invoice to the ESCO when a consolidated bill is rendered for their end use retail customer. These standards are based on the ASC X12 Ver/Rel 004010 standard and related UIG guidelines.
One account per 810		• Each transaction may contain only one account for one commodity (i.e. electric, gas, etc.).
Validation Field		• Transactions will be validated based on the customer's utility account number (with check digit, if included).
Total Outstanding Balance Segment		• The Total Outstanding Balance segment (BAL*YB) is used to communicate the customer's total outstanding balance. The total outstanding balance is the amount owed from previous billing periods less actual payments applied to date plus the current period charges sent in the TDS01 element of an 810 Invoice transaction. • For accounts on Budget Bill for the ESCO's charges, the amount sent in BAL03 of this segment must equal the total actual charges (calculated based on usage) less total payments/adjustments applied to date. • The Total Outstanding Balance segment is not used in an 810 Cancel Invoice (BIG08 = '01'). • Use of the Total Outstanding Balance segment for an 810 Original Invoice (BIG08 = '00') is dependent on the utilities' payment processing method. Two methods are used in NY State, the Pay-As-You-Get-Paid method and the Purchased Receivables method. ➢ The Total Outstanding Balance segment must be sent for the Pay-As-You-Get-Paid method. ➢ The Total Outstanding Balance segment is NOT used in the Purchased Receivables method.
Dates		• 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. • 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. • The transaction creation date (BIG01) should be considered synonymous with the date the consolidated bill was rendered.

IT1 Loop		• Multiple IT1 Loops may be sent in each 810 Invoice transaction. This transaction set standard limits the number of IT1 loops in a transaction to 30 or less. • 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 specific metered service point (IT109=METER) or apply to un-metered services (IT109=UNMET). • The TXI segment is a data segment within the IT1 loop. • The SLN loop (see below) is within the IT1 loop. • 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. • 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=METER would not contain a TXI segment. • 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.
SAC Segment		• This segment contains all Charges and/or Adjustments, other than tax amounts, which were presented on the customer's current bill. • 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. ➢ 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. ➢ 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. • Adjustments to amounts billed in prior periods may be sent in the current 810 invoice as charge items (SAC01=C for 'Charge') and the amount sent in SAC05 may be preceded by a minus (-) sign depending upon the nature of the adjustment.
TDS Segment		• The amount sent in the TDS segment equals the sum of all SAC05 amounts where SAC01=C and all TXI02 amounts where TXI07 = A and should equal the sum of the current charges/adjustments sent in this 810 Invoice.

SLN Loop		• Each SLN Loop is comprised of one SLN segment and one corresponding SAC segment. • The SLN segment is used as a loop counter for the SAC segment. • Multiple SLN loops may be sent per IT1 loop but each utility supporting rate ready consolidated billing may establish the maximum number of charge amounts that will be sent in an 810 Invoice transaction. This transaction set standard limits the number of SLN loops in a transaction to 25 or less. • The amounts sent in SAC05 in the SAC segment within an SLN loop must apply at the level defined in IT109. • 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 METER or UN-METERED level, the IT1 Loop where IT109=ACCOUNT will contain a TXI segment but will not contain an SLN loop. • 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.

<table>
<tr>
<td>Budget Billing</td>
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- Utilities offering Rate Ready consolidated billing may not support Budget Billing arrangements for the ESCO's portion of the consolidated bill.
- When a utility does support Budget Billing arrangements for the ESCO, the budget billing information that will be sent to the ESCO is dependent on the payment processing method chosen by the utility. Two methods are used in NY State: the Pay-As-You-Get-Paid method and the Purchased Receivables method.
- For the Purchased Receivables method, neither the budget billing balance information described in the BAL*41 or BAL*46 segments nor the current period budget bill charges (as described in SAC04 element notes) will be sent. However, the actual charges based on usage must be calculated by the utility and will be sent to the ESCO in the 810 transaction. The monetary amount of the actual charges will be sent in an SAC05 element in which the SAC01 element for that SAC segment = 'C' for 'Charge'. The SAC04 element in that SAC segment will contain an appropriate code to identify the nature of the current month charges sent in SAC05.
- For the Pay-As-You-Get-Paid Method, the 810 invoice may contain the following data segments pertaining to budget billing:
  - BAL*41 – Balance Detail (Budget Plan Cumulative Difference) will contain the plan-to-date cumulative difference between actual charges based on usage and budget plan charges
  - BAL*46 – Balance Detail (Budget Plan Current Month Difference) will contain the current month difference between actual charges based on usage and budget plan charges
  - Multiple SLN loops with SAC segments which contain the following charges:
    - <u>Current month actual charges</u> – This is the current month actual charges based on usage. An SLN loop is sent with an SAC segment where SAC01 = 'C' for 'Charge' and SAC04 contains the appropriate code to identify the nature of the current charge amount sent in SAC05.
    - <u>Current Budget Billing Charge</u> – This is the current month budget amount billed to the customer by the utility on behalf of the ESCO. An SLN loop is sent with an SAC segment where SAC01 = 'N' for 'No Charge' and SAC04 = BUD001 (Current Budget Billing Charge).
    - <u>Budget Billing Settlement charge</u> - This is the budget bill settlement amount that is sent when a budget plan is canceled or settled for the plan year. The settlement amount is the difference between the actual charges based on usage and the budget amounts paid over the life of the budget or the last settlement date. An SLN loop is sent with an SAC segment where SAC01 = 'N' for 'No Charge' and SAC04 = BUD002 (Budget Billing Settlement). When the settlement amount is a credit, a minus sign (-) must precede the amount sent in SAC05.

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</table>

810 Original/Cancel		• An 810 Original Invoice transaction (BIG08 = 00) 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 transaction. • An 810 Cancel Invoice transaction (BIG08 = 01) must cross-reference the corresponding 867 usage transaction that is being canceled by sending the reference number originally sent in the BPT02 element of the canceled 867 transaction in the BIG05 element of the invoice transaction. • An 810 Cancel Invoice transaction 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. • When consumption previously sent in an 867 Monthly Usage transaction, is canceled an 867 Cancel transaction must be sent; the utility must also transmit an 810 Cancel Invoice transaction to cancel the charges related to the cancelled usage. • The 810 Cancel Invoice may not cancel all charges sent in the original 810 Invoice transaction. To cancel taxes sent in the original 810 Invoice, an IT1 loop(s) is sent with a corresponding TXI segment(s) where TXI02 contains the monetary amount of the taxes cancelled in the 810 Cancel Invoice. When there are no taxes to cancel, the TXI segment will not be included in the IT1 loop of the Cancel transaction. To cancel charges sent in the SLN loop(s) of the original 810 Invoice transaction, an SLN loop(s) is sent with a corresponding SAC segment(s) where SAC01 indicates the treatment of charges in SAC05 as specified on the original 810 transaction and SAC05 communicates the dollar amount(s) cancelled for the charge type(s) indicated in SAC04. • The SAC08 element (Rate), SAC09 (Unit of Measure) and SAC10 element (Quantity) are required in an Original 810 Invoice to describe the nature of the charges billed to the customer. These elements may be sent in an 810 Cancel transaction at the discretion of the billing party. • The BAL segments (i.e. 'Total Outstanding Balance', 'Budget Plan Cumulative Difference', and 'Budget Plan Current Month Difference') sent in an 810 Original Invoice, as applicable, will NOT be sent in an 810 Cancel transaction. • The TDS segment must be sent in the 810 Cancel Invoice transaction 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'. • 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 may be sent to the current ESCO of record for all, or some, of the billing periods affected by the cancellation. • Both the billing (LDC) and non-billing (ESCO) parties must process all 867 Cancel transactions prior to processing 867MU original usage transactions.

Data Element Attributes		• 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: ➢ a *value of one hundred dollars and twenty cents ($100.20) could be transmitted as 100.2 in an SAC05 element.* *TXI~LS~**100.2**~.06~~~~A~1670* ➢ *a value of one cent ($0.01) could be transmitted as .01 in an SAC05 element.* *TXI~LS~**.01**~.06~~~~A~.16* ➢ *a value of one hundred dollars and zero cents ($100.00) could be transmitted as 100 in an SAC05 element.* *TXI~LS~**100**~.06~~~~A~1666.66* ➢ *a value of minus one hundred dollars and zero cents (-$100.00) could be transmitted as –100.00 in an SAC05 element.* *TXI~LS**~-100.00**~.06~~~~A~1666.66* ➢ *a value of minus one hundred dollars and twenty cents (-$100.20) could be transmitted as -100.2 in an SAC05 element.* *TXI~LS~**-100.2**~.06~~~~A~-1670* • 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". 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. ➢ *a value of one hundred dollars and four cents ($100.04) would be transmitted as 10004 in an SAC05 element.* *SAC~N~~EU~BUD002~**10004**~~~25.01~EA~4~~~~BUDGET SETTLEMENT AMT* ➢ *a value of one cent ($0.01) would be transmitted as 1 in and SAC05 element.*

		*SAC~N~~EU~BUD002~**1**~~~.01~EA~1~~~~BUDGET SETTLEMENT AMT* ➢ *a value of one hundred dollars and zero cents ($100.00) would be transmitted as 10000 in an SAC05 element.* *SAC~N~~EU~BUD002~**10000**~~~25.00~EA~4~~~~BUDGET SETTLEMENT AMT*
Rejection		• An 810 Invoice transaction may be rejected for validation or syntax errors or when data segments/elements are missing or invalid including errors in Utility Account Number, commodity type, bill option, meter number (where applicable) or the ESCO Customer Account Number (where applicable). Please refer to the segment notes in specific segments for more detailed information. • Information sent in an 810 Invoice transaction should not be used to update the recipients' customer records. An 814 Account Maintenance (Change) transaction must be used to report and record changes in a customer's information.
Definitions		• 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 is used in this document to refer to either a gas or electric supplier. The principal parties involved in this 810 Transaction Set implementation guide are: ➢ The end-use customer (Code 8R) ➢ The Utility (LDC) (Code 8S) ➢ The Supplier (ESCO) (Code SJ).
Companion Documents		• All of the applicable business rules for New York are not necessarily documented in this implementation guide. Accordingly, the *810 Rate Ready Invoice Business Process Document* and the *810 Rate Ready Invoice Data Dictionary* should be reviewed where further clarification is needed. Further information regarding the processing of EDI transactions may be found in the *Technical Operating Profile for Electronic Data Interchange in New York.*

Implementation Guideline Field Descriptions

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.
You must also review the grayboxes below for additional NY Rules.

Segment: **REF** **Reference Identification (Utility Customer Account Number)**
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.

This section displays the NY Rules for implementation of this segment.

ccount number assigned to the customer is used for
d must be present on all transactions.

One or more examples.

2~011231287654398

Data Element Summary

	Ref Des.	Data Element	Name		X12 Attributes
Mand.	**REF01**	**128**	**Reference Identification Qualifier**		**M ID 2/3**
			12	Billing Account REF02 contains the Utility-assigned account number for the customer.	
Must Use	**REF02**	**127**	**Reference Identification**		**X AN 1/30**
			Utility assigned customer account number The utility account number must be supplied without interveni spaces or non-alphanumeric characters. (Characters added to aid in visi presentation on a bill, for example, should be removed)		

Se tes: **1** REF04 contains data relating to the value cited in REF02.

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 – Utility Rate Ready

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 Invoice sent by the Utility to the ESCO when the Utility is presenting a consolidated bill to the customer using the Rate Ready method.

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		
5	050	REF	Reference Identification (Original Invoice Number)	O	1		
6	050	REF	Reference Identification (ESCO Customer Account Number)	O	1		
7	050	REF	Reference Identification (Utility Customer Account Number)	O	1		
8	050	REF	Reference Identification (Previous Utility Customer Account Number)	O	1		
9	050	REF	Reference Identification (Utility Account Number for the ESCO)	O	1		
10	050	REF	Reference Identification (Bill Presenter)	O	1		
11	050	REF	Reference Identification (Bill Calculator)	O	1		
12	050	REF	Reference Identification (Gas Pool ID)	O	1		
			LOOP ID - N1			1	
13	070	N1	Name (ESCO)	O	1		
			LOOP ID - N1			1	
14	070	N1	Name (Utility)	O	1		
			LOOP ID - N1			1	
15	070	N1	Name (Customer)	O	1		
16	130	ITD	Terms of Sale/Deferred Terms of Sale (Payment Due Date)	O	1		
17	212	BAL	Balance Detail (Total Outstanding Balance)	O	1		
18	212	BAL	Balance Detail (Budget Plan Cumulative Difference)	O	1		
19	212	BAL	Balance Detail (Budget Plan Current Month Difference)	O	1		

Detail:

Page No.	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
			LOOP ID - IT1			30	
20	010	IT1	Baseline Item Data (Charge Category)	O	1		
22	040	TXI	Tax Information	O	10		
24	120	REF	Reference Identification (Meter Number)	O	>1		
25	150	DTM	Date/Time Reference (Period Start Date)	O	1		
26	150	DTM	Date/Time Reference (Period End Date)	O	1		

			LOOP ID - SLN			25	
27	200	SLN	Subline Item Detail	O	1		
28	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
32	010	TDS	Total Monetary Value Summary (Total Current Charges)	M	1		
33	070	CTT	Transaction Totals	O	1		n1
34	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.

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

	Ref. Des.	Data Element	Name	Attributes
Mand.	**ST01**	**143**	**Transaction Set Identifier Code**	**M ID 3/3**
			810 Invoice	
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~~~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.			
Must Use	**BIG05**	**328**	**Release Number**		**O**	**AN 1/30**
			The number originally transmitted in the BPT02 element of the 867 usage transaction that was the basis for the charge data in this invoice must be sent in the BIG05 element.			
Must Use	**BIG07**	**640**	**Transaction Type Code**		**O**	**ID 2/2**
			FE	Memorandum, Final Bill		
				The final (last) bill for a non-payable invoice (memo)		
				The customer's account with the utility has been closed.		
			ME	Memorandum		
				Regular Bill		
Must Use	**BIG08**	**353**	**Transaction Set Purpose Code**		**O**	**ID 2/2**
			00	Original		
			01	Cancellation		
				Cancels an entire invoice/transaction.		

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 on a Cancel (BIG08=01) transaction. This segment contains the BIG02 element from the original 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 (ESCO 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 Required if provided in advance by the ESCO (i.e. on the 814 enrollment or 814 change transactions). REF~11~A12345009Z

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**REF01**	**128**	**Reference Identification Qualifier**	**M ID 2/3**
			11 Account Number REF02 is the ESCO Assigned account number for the customer.	
Must Use	**REF02**	**127**	**Reference Identification**	**X AN 1/30**
			ESCO's assigned account number for the customer.	

Segment: **REF** **Reference Identification (Utility Customer Account Number)**
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

The Utility account number assigned to the customer is used for validation and must be present on all transactions.

REF~12~011231287654398

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**REF01**	**128**	**Reference Identification Qualifier**	**M ID 2/3**
			12 Billing Account REF02 contains the Utility-assigned account number for the customer.	
Must Use	**REF02**	**127**	**Reference Identification**	**X AN 1/30**
			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 (Previous 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 Where a utility changes an existing customer's account number as a business process (and as noted in its Utility Maintained EDI Guide), this segment is required when the utility assigned account number for the customer has changed in the last 90 days. Otherwise, not used. REF~45~9194132485705971

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**REF01**	**128**	**Reference Identification Qualifier**		**M**	**ID 2/3**
			45	Old Account Number		
				REF02 is the Utility's previous account number for the customer.		
Must Use	**REF02**	**127**	**Reference Identification**		**X**	**AN 1/30**
			Previous utility assigned customer account number. Current utility assigned account number must be sent in REF~12.			

Segment: **REF** **Reference Identification (Utility Account Number for the ESCO)**
Position: 050
Loop:
Level: Heading
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:
Optional

An account number assigned to the ESCO by the Utility.

REF~AJ~394584752

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 Account number for the ESCO		
Must Use	**REF02**	**127**	**Reference Identification** This is the Utility assigned account number for the ESCO.		**X**	**AN 1/30**

Segment: **REF** **Reference Identification (Bill Presenter)**
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

REF~BLT~LDC

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**REF01**	**128**	**Reference Identification Qualifier**		**M**	**ID 2/3**
			BLT	Billing Type		
				Identifies whether the bill is a single bill consolidated by the Utility, a single bill consolidated by the ESCO, or separate bills presented by each party.		
Must Use	**REF02**	**127**	**Reference Identification**		**X**	**AN 1/30**
			LDC	Utility is the consolidated Bill Presenter		

Segment: **REF** **Reference Identification (Bill Calculator)**
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

REF~PC~LDC

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**REF01**	**128**	**Reference Identification Qualifier**		**M**	**ID 2/3**
			PC	Production Code		
				Indicates who will calculate bill charges.		
Must Use	**REF02**	**127**	**Reference Identification**		**X**	**AN 1/30**
			LDC	The Utility Calculates the ESCO Charges		
				RATE READY: The ESCO supplies a rate code or price to the Utility and the Utility calculates the ESCO's portion of the consolidated bill.		

Segment:	**REF** **Reference Identification (Gas Pool ID)**
Position:	050
Loop:	
Level:	Heading
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:	Optional REF~VI~102356

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Mand.	**REF01**	**128**	**Reference Identification Qualifier**		**M ID 2/3**
			VI	Pool Number	
				Gas Pool IDs are assigned to a gas ESCO by the Utility and are used to define a unique sub-grouping of customers.	
Must Use	**REF02**	**127**	**Reference Identification**		**X AN 1/30**
			Gas Pool ID associated with the customer account billed.		

Segment: **N1** **Name (ESCO)**
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~SJ~ESP COMPANY~1~123456789

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**N101**	**98**	**Entity Identifier Code**		**M**	**ID 2/3**
			SJ	Service Provider		
				Identifies the ESCO participating in this transaction.		
Optional	**N102**	**93**	**Name**		**X**	**AN 1/60**
			Free Form ESCO Company Name Supplemental text information supplied, if desired, to provide "eyeball" identification of the ESCO. 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 (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

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

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

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**N101**	**98**	**Entity Identifier Code**		**M**	**ID 2/3**
			8R	Consumer Service Provider (CSP) Customer		
				REF02 contains the name of the end use customer targeted by this transaction.		
Must Use	**N102**	**93**	**Name**		**X**	**AN 1/60**
			Customer Name This segment may be supplied to provide "eyeball' identification of the customer in this transaction. It is not necessary for successful completion of the transaction but may be provided by mutual agreement between trading partners.			

Segment:	**ITD** **Terms of Sale/Deferred Terms of Sale (Payment Due Date)**
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 Required in an 810 Original invoice (BIG08='00') under the Pay-As-You-Get-Paid business model. Not used in the Purchased Receivables business model or in an 810 Cancel invoice (BIG08=01). 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 customer.	

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 service
Syntax Notes:	
Semantic Notes:	
Comments:	
Notes:	Conditional This segment must be sent in an 810 Original Invoice (BIG08=00) when the Pay-As-You-Get-Paid method is being used. This segment is Not Used in an Original Invoice when the method is Purchase Receivables OR in an 810 Cancel Invoice (BIG08=01). BAL~M~YB~130.00 BAL~M~YB~150 BAL~M~YB~-150.00 BAL~M~YB~122.2

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
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 amount in BAL03 is the customer's total outstanding balance. This is the amount the customer owes from previous billing periods , less actual payments applied to date, plus the current billing period charges. For accounts on Budget Bill for the ESCO's charges, the amount sent in BAL03 is the total actual charges (not the monthly budget installment amount) less total payments/adjustments applied to date.	
Mand.	**BAL03**	**782**	**Monetary Amount** Outstanding Balance This element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.		**M R 1/18**

Segment: **BAL** **Balance Detail (Budget Plan Cumulative Difference)**
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

When the Utility is providing the customer a Budget bill on behalf of the ESCO this segment must be sent in an 810 Original Invoice (BIG08='00') when the Pay-As-You-Get-Paid method is being used. This segment is Not Used in an Original Invoice when the method is Purchased Receivables OR in an 810 Cancel Invoice (BIG08='01').

BAL~Y~46~150.00
BAL~Y~46~150
BAL~Y~46~-40.22

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Mand.	**BAL01**	**951**	**Balance Type Code**		**M ID 1/2**
			Y	Year to Date	
Mand.	**BAL02**	**522**	**Amount Qualifier Code**		**M ID 1/3**
			46	Cumulative Cost Variance (CV) The cumulative difference between the cumulative Budgeted Cost for Work Performed and the cumulative Actual Cost for Work Performed Cumulative difference between actual charges based on usage and budget amounts billed to date	
Mand.	**BAL03**	**782**	**Monetary Amount**		**M R 1/18**
			Budget Plan Cumulative Difference This element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.		

Segment: **BAL** **Balance Detail (Budget Plan Current Month Difference)**
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

When the Utility is providing the customer a Budget Bill on behalf of the ESCO this segment must be sent in an 810 Original Invoice (BIG08='00') when the Pay-As-You-Get-Paid method is being used. This segment is Not Used in an Original Invoice when the method is Purchased Receivables OR in an 810 Cancel Invoice (BIG08='01').

BAL~M~41~-12.22
BAL~M~41~100.22
BAL~M~41~100

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Mand.	**BAL01**	**951**	**Balance Type Code**		**M ID 1/2**
			M	Current Month	
Mand.	**BAL02**	**522**	**Amount Qualifier Code**		**M ID 1/3**
			41	Current Cost Variance (CV) The difference between the Budgeted Cost for Work Performed and the Actual Cost of Work Performed Current month difference between actual charges based on usage and current month budget bill amount.	
Mand.	**BAL03**	**782**	**Monetary Amount**		**M R 1/18**
			Budget Plan Current Difference This element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.		

Segment: **IT1** **Baseline Item Data (Charge Category)**
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

Each 810 Invoice transaction must contain at least one IT1 loop and may contain multiple loops depending upon the level at which charges are billed. The IT109 element is used to distinguish between the level at which charges are billed.

ACCOUNT:

When ESCO charges are billed at the account level, one IT1 loop will be provided for the entire account. Only one IT1 loop where IT109 = ACCOUNT may be sent in a transaction.

METER/UNMETERED:

When ESCO charges are billed at the meter level, one IT1 Loop will be provided for each meter where REF~MG contains the meter number associated with the data provided in the IT1 loop.

When ESCO charges pertain to un-metered service end points, an IT1 Loop will be provided where IT109=UNMET and the REF~MG segment would not be sent.

IT1~1~~~~~SV~GAS~C3~ACCOUNT
IT1~2~~~~~SV~GAS~C3~METER

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Must Use	**IT101**	**350**	**Assigned Identification**		**O**	**AN 1/2**
Must Use	**IT106**	**235**	**Product/Service ID Qualifier**		**X**	**ID 2/2**
			SV	Service Rendered		
Must Use	**IT107**	**234**	**Product/Service ID**		**X**	**AN 1/48**
			There may be only one commodity (Electric or Gas) for each 810 transaction.			
			EL	Electric Service		
			GAS	Gas Service		

Must Use	**IT108**	**235**	**Product/Service ID Qualifier**		**X**	**ID 2/2**
			C3	Classification		
Must Use	**IT109**	**234**	**Product/Service ID**		**X**	**AN 1/48**
			ACCOUNT	Charges/Taxes at an Account level		
			METER	Charges/Taxes at a Meter Level		
			UNMET	Charges/Taxes at a Meter Level for Unmetered Services		

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: Conditional

When the customer's bill includes charges for taxes, a TXI segment is required in the IT1 loop which contains the level at which taxes were applied. For example, if taxes were applied at an account level, the TXI segment must be sent in the IT1 loop where IT109 = ACCOUNT.

TXI~GR~6.6~~~~A
TXI~LS~8.5~.0425~~~~A~200.0
TXI~LS~6.03~.06~~~~O~100.50

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**TXI01**	**963**	**Tax Type Code**	**M ID 2/2**
			GR Gross Receipts Tax	
			LS State and Local Sales Tax	
Must Use	**TXI02**	**782**	**Monetary Amount**	**X R 1/18**
			Calculated Tax Amount This element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.	
Optional	**TXI03**	**954**	**Percent**	**X R 1/10**
			Rate Used to Calculate Tax When either TXI03 or TXI08 is sent the other is required. The amount sent in TXI08 multiplied by the percent (rate) sent in TXI03 should equal the calculated tax amount sent in TXI02. If the tax rate is being sent the percent would be expressed as either 0.xx or .xx. This element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.	

Must Use	**TXI07**	**662**	**Relationship Code**	**O**	**ID 1/1**
			A — Add The amount in the TXI02 is included when summing the invoice total in TDS01.		
			O — Information Only Charges which relate to but may not be included in or added to the unit price of the SLN. (i.e., compute WATS calculation based upon usage amounts) The amount in the TXI02 is ignored when summing the invoice total in TDS01.		
Optional	**TXI08**	**828**	**Dollar Basis For Percent**	**O**	**R 1/9**
			Taxable Dollar Amount When either TXI03 or TXI08 is sent the other is required. The amount sent in TXI08 multiplied by the percent (rate) in TXI03 should equal the calculated tax amount sent in TXI02. This element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.		

Segment: **REF** **Reference Identification (Meter Number)**
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

This segment must be sent when charges/adjustments or taxes are being sent at the meter level (IT109=METER), otherwise not used.

When the meter number provided does not match the information in the receiving parties records, an 810 Invoice transaction may be rejected via an 824 Application Advice transaction.

REF~MG~123456MG

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Mand.	**REF01**	**128**	**Reference Identification Qualifier**	**M**	**ID 2/3**
			MG Meter Number		
Must Use	**REF02**	**127**	**Reference Identification**	**X**	**AN 1/30**
			Meter Number Meter number for the meter associated with the charges described in this IT1 loop. Meter numbers may only contain uppercase letters (A to Z) and digits (0-9). Note that punctuation (spaces, dashes, etc.) must be excluded.		

Segment: **DTM** **Date/Time Reference (Period Start Date)**
Position: 150
Loop: IT1 Optional (Must Use)
Level: Detail
Usage: Optional (Must Use)
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: Required

The billing period indicated by the dates sent in the DTM*150 and DTM*151 segments in this transaction must match the period indicated in the QTY loops in the applicable PTD loops in the corresponding 867 Monthly Usage transaction referenced in segment BIG05 in this transaction. The period start date should match the earliest period start date in the 867.

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.	

Segment: **DTM** **Date/Time Reference (Period End Date)**
Position: 150
Loop: IT1 Optional (Must Use)
Level: Detail
Usage: Optional (Must Use)
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: Required

The billing period indicated by the dates sent in the DTM*150 and DTM*151 segments in this transaction must match the period indicated in the QTY loops in the applicable PTD loops in the corresponding 867 Monthly Usage transaction referenced in segment BIG05 in this transaction. The period end date should match the latest period end date in the 867.

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.	

Segment:	**SLN** **Subline Item Detail**
Position:	200
Loop:	SLN Optional (Dependent)
Level:	Detail
Usage:	Optional (Dependent)
Max Use:	1
Purpose:	To specify product subline detail item data

Syntax Notes:

1 If either SLN04 or SLN05 is present, then the other is required.
2 If SLN07 is present, then SLN06 is required.
3 If SLN08 is present, then SLN06 is required.
4 If either SLN09 or SLN10 is present, then the other is required.
5 If either SLN11 or SLN12 is present, then the other is required.
6 If either SLN13 or SLN14 is present, then the other is required.
7 If either SLN15 or SLN16 is present, then the other is required.
8 If either SLN17 or SLN18 is present, then the other is required.
9 If either SLN19 or SLN20 is present, then the other is required.
10 If either SLN21 or SLN22 is present, then the other is required.
11 If either SLN23 or SLN24 is present, then the other is required.
12 If either SLN25 or SLN26 is present, then the other is required.
13 If either SLN27 or SLN28 is present, then the other is required.

Semantic Notes:

1 SLN01 is the identifying number for the subline item.
2 SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4 SLN08 is a code indicating the relationship of the price or amount to the associated segment.

Comments:

1 See the Data Element Dictionary for a complete list of IDs.
2 SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3 SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Notes:

Conditional

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, METER OR UNMET). 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.

SLN~1~~A/
followed by an SAC segment
SLN~2~~A/
followed by the next SAC segment, etc.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**SLN01**	**350**	**Assigned Identification**	**M AN 1/2**
			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.	
Mand.	**SLN03**	**662**	**Relationship Code**	**M ID 1/1**
			The relationship codes will always equal '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: **SAC** **Service, Promotion, Allowance, or Charge Information (Charges/Adjustments)**
Position: 230
Loop: SLN Optional (Dependent)
Level: Detail
Usage: Optional (Must Use)
Max Use: 1
Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

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

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

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

Notes: Conditional

Each SLN Loop being sent must contain both an SLN segment and an SAC segment.

Each SAC segment will contain the amount and description for a single charge or adjustment that was presented on the current month's bill.

SAC~N~~GU~BUD001~5900~~~59.00~MO~1~~~~~BUDGET PLAN MONTHLY PAYMENT

SAC~N~~EU~BUD002~12501~~125.01~EA~1~~~~BUDGET SETTLEMENT AMOUNT

SAC~C~~EU~LPC001~1500~~15.00~MO~1~~~~LATE FEE FLAT CHG

SAC~C~~EU~LPC001~1000~~.10~DO~100~~~~CALCULATED LATE FEE (.10 x Outstanding Balance of $100 = $10)

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Mand.	**SAC01**	**248**	**Allowance or Charge Indicator**		**M ID 1/1**
			C	Charge	
			N	No Allowance or Charge The amount in the SAC05 will be ignored when summing the invoice total in TDS01. This code is commonly used to convey Budget Bill charges and Budget Bill Settlement amounts.	
Must Use	**SAC03**	**559**	**Agency Qualifier Code**		**X ID 2/2**
			EU	Electric Utilities	
			GU	Natural Gas Utilities	
Must Use	**SAC04**	**1301**	**Agency Service, Promotion, Allowance, or Charge Code**		**X AN 1/10**
			Required SAC04 codes are sent to describe charges/adjustments sent in the SAC05 element.		
			ADJ002	Adjustment	
			BAS001	Customer Charge	
			BAS002	Special Billing Charge	
			BUD001	Current Budget Billing Charge Code indicating SAC05 contains monthly budget charges. When used, SAC01 must equal 'N' for no charge.	
			BUD002	Budget Billing Settlement Code indicating SAC05 contains budget settlement/cancellation amount. When used, SAC01 must equal 'N' for no charge.	
			CRE001	Credit	
			CRE030	ESCO Pricing Adjustment Credit A Guaranteed Savings Program (GSP) Credit, which is a type of an ESCO Pricing Adjustment (EPA) Credit, is shown as a negative amount. Adjustments to reduce prior GSP Credits are shown as positive amounts.	
			ENC001	Energy Charge	
			LPC001	Late Payment Charge Late fees will not be communicated for the Purchase Receivables method but will be communicated in the Invoice transaction when the Pay-As-You-Get-Paid method is being used. The code 'LPC001' may be sent to describe either a late fee flat charge amount or late fees that are calculated as a percentage of the outstanding balance. When both a flat charge and a calculated late fee have been assessed on the same account, the flat charge will be sent in one SAC segment and the calculated amount will be sent in a second SAC segment but the SAC04 element will contain 'LPC001' in both segments. The values sent in the SAC08 and SAC10 elements will be used to distinguish the late fee flat charge from the calculated late fee amount. (Refer to the examples in the SAC segment notes or the sample transactions appended to this Implementation Guide).	

			When late fees have been forgiven on the ESCO's portion of the bill, the SAC04 element will contain 'LPC001' but the amount in SAC05 will be preceded by a minus (-) sign.		
			ODL002 Street Lighting		
			RTC001 Returned Check Charge		
Must Use	**SAC05**	**610**	**Amount**	**O**	**N2 1/15**
			Charge/Adjustment Amount Data elements whose X12 attribute type is 'N' must be treated as numbers with implied decimal precision. Type "N" numbers are assumed to be positive numbers and a minus (-) sign must precede the amount when a negative number is being sent. For the SAC05 element, the attribute column indicates "N2 1/15". This means 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. The SAC08 multiplied by the SAC10 must ALWAYS equal the SAC05.		
Cond.	**SAC08**	**118**	**Rate**	**O**	**R 1/9**
			Rate The SAC08, SAC09 and SAC10 elements are sent to provide the quantity, unit of measure and rate associated with the amount sent in SAC05. These elements are required in an 810 Original Invoice and may be sent in an 810 Cancel transaction at the discretion of the billing party. When one of these elements is sent, they all must be sent. The amount sent in SAC08 multiplied by the amount sent in SAC10 should equal the amount sent in SAC05. This data element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.		
Cond.	**SAC09**	**355**	**Unit or Basis for Measurement Code**	**X**	**ID 2/2**
			Unit or Measurement Code This element is sent to indicate the basis or unit of measurement used to calculate the charge/adjustment amount sent in SAC05. This element is required in an 810 Original Invoice (BIG01=00) and may be sent in an 810 Cancel transaction (BIG01=01) at the discretion of the billing party. The SAC09 element must be sent when an SAC08 or SAC10 element is present in a transaction.		

Code	Description
BZ	Million BTU's Decatherms
CF	Cubic Feet
DA	Days
DO	Dollars, U.S.
EA	Each
HH	Hundred Cubic Feet ccf
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	
			K7	Kilowatt Measure of electrical power	
			KH	Kilowatt Hour	
			MO	Months	
			TD	Therms	
			TZ	Thousand Cubic Feet	
			YR	Years	
Cond.	**SAC10**	**380**	**Quantity**		**X R 1/15**
			Consumption or Quantity The SAC08, SAC09 and SAC10 elements are sent to provide the quantity, unit of measure and rate associated with the amount sent in SAC05. These elements are required in an 810 Original Invoice and may be sent in an 810 Cancel transaction at the discretion of the billing party. When one of these elements is sent, they all must be sent. The amount sent in SAC08 multiplied by the amount sent in SAC10 should equal the amount sent in SAC05. This data element is a real number. 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; a decimal point must be sent when decimal precision is required. When transmitting a real number it is not necessary, but is acceptable, to transmit insignificant digits such as leading and/or trailing zeros.		
Optional	**SAC15**	**352**	**Description**		**X AN 1/80**
			Text description Additional text information used to further describe charges displayed in SAC05.		

Segment: **TDS** **Total Monetary Value Summary (Total Current Charges)**
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To specify the total invoice discounts and amounts
Syntax Notes:
Semantic Notes:
1 TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
2 TDS02 indicates the amount upon which the terms discount amount is calculated.
3 TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
4 TDS04 indicates the total amount of terms discount.
Comments:
1 TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.
Notes: Required

The sum of the amounts sent in each TXI02 element in the transaction where TXI07= 'A' plus each SAC05 element in the transaction where SAC01= 'C' will equal the amount sent in this segment.
The total invoiced amount sent in TDS01 will NOT include amounts designated as 'O' (Informational Only) in the TXI07 element or 'N' (No Allowance or Charge) in the SAC01 element.

TDS~19875 The sum of the charges/adjustments plus taxes in this invoice is $198.75

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**TDS01**	**610**	**Amount**	**M N2 1/15**

Total Current Charges

The TDS element is a type "N" number. For these numbers decimal precision is implied and, therefore, a decimal point should NOT be sent. Type "N" numbers are assumed to be positive numbers and a minus (-) sign must precede the amount when a negative number is being sent. For the TDS01element, the attribute column indicates "N2 1/15". This means 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.

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~1

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**CTT01**	**354**	**Number of Line Items**	**M N0 1/6**
			The number of IT1 segments.	

Segment:	**SE Transaction Set Trailer**
Position:	080
Loop:	
Level:	Summary
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)
Syntax Notes:	
Semantic Notes:	
Comments:	**1** SE is the last segment of each transaction set.
Notes:	Required SE~35~000000001

Data Element Summary

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

Scenario 1: URR Invoice with GSP Credit

ST*810*000000001	Transaction Set header; transaction defined is an *810*; control number assigned by originator
BIG*20150831*B00000000000001700111***U0000000000001881111**ME*00	Transaction date; Invoice number; Cross Reference Number; Regular Bill; Original Invoice
REF*12*1234567890	Utility assigned account number for the customer
REF*AJ*0121234000	Utility assigned account number for the ESCO
REF*BLT*LDC	Utility is Bill Presenter
REF*PC*LDC	Utility is Bill Calculator
N1*SJ*SUPPLIER NAME*1*111111111	ESCO Name and DUNS number
N1*8S*UTILITY NAME*1*999999999	Utility Name and DUNS number
N1*8R*CUSTOMER NAME	Customer Name
IT1*1*****SV*EL*C3*ACCOUNT	Charge Category
TXI*LS*11.64*.08125****A*143.23	Sales tax; amount; rate; Tax is Additive; basis
DTM*150*20150630	Billing Period Start Date
DTM*151*20150828	Billing Period End Date
SLN*1**A	First SLN segment
SAC*C**EU*ENC001*14323***.091*KH*1574	Energy Charge
SLN*2**A	Second SLN segment
SAC*C**EU*CRE030*-400***-400*EA*1	GSP Credit of $4
TDS*15087	Total current charges
CTT*1	Number of IT1 segments
SE*20*000000001	Transaction Set trailer; segment count; control number

Scenario 2: URR Invoice without EPA Credit

ST*810*000000001	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20150831*B00000000000001700111***U0000000000001881111**ME*00	Transaction date; Invoice number; Cross Reference Number; Regular Bill; Original Invoice
REF*12*1234567890	Utility assigned account number for the customer
REF*AJ*0121234000	Utility assigned account number for the ESCO
REF*BLT*LDC	Utility is Bill Presenter
REF*PC*LDC	Utility is Bill Calculator
N1*SJ*SUPPLIER NAME*1*111111111	ESCO Name and DUNS number
N1*8S*UTILITY NAME*1*999999999	Utility Name and DUNS number
N1*8R*CUSTOMER NAME	Customer Name
IT1*1*****SV*EL*C3*ACCOUNT	Charge Category
TXI*LS*11.64*.08125****A*143.23	Sales tax; amount; rate; Tax is Additive; basis
DTM*150*20150630	Billing Period Start Date
DTM*151*20150828	Billing Period End Date
SLN*1**A	SLN segment
SAC*C**EU*ENC001*14323***.091*KH*1574	Energy Charge
TDS*15487	Total current charges
CTT*1	Number of IT1 segments
SE*18*000000001	Transaction Set trailer; segment count; control number