Case 98-M-0667

New York Implementation Standard

For

Standard Electronic Transactions

TRANSACTION SET

810 Invoice

Utility Bill Ready Billing

Ver/Rel 004010

April 7, 2015
Version 1.3

		Summary of Changes
6/21/02		Initial Release
March 11, 2003 Version 1.1		Version 1.1 Issued
		Added code 'ENC043' to list of acceptable SAC04 codes (see page 33). This code was inadvertently omitted from the initial document issued on 6/21/02.
August 20, 2009 Version 1.2		Two new BAL segments were added in the N1 (Customer) Loop to enable ESCOs to transmit cumulative actual charges and budget plan installments billed to date for presentation on the ESCO portion of a customer's consolidated bill when that customer is on a budget plan for ESCO charges. In addition minor housekeeping changes were made in the text of the Front Matter and certain existing BAL segment notes to ensure compliance with revised HEFPA regulations and updates to the Uniform Business Practices and so that the language in all BAL segments pertaining to budget billing is consistent. The new and revised segments are: BAL~Y~46 Budget Plan Cumulative Difference BAL~Y~0S Budget Plan Actual Charges Billed to Date BAL~Y~0R Budget Plan Installments Billed to Date BAL~M~41 Budget Plan Current Month Difference Sample Scenario 1 in version 1.1 of the standard has been deleted and Sample Scenario 2 has been updated to reflect the use of the new BAL segments.
April 7, 2015		• 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 ESCO bill credits to Assistance Program Participants.

		Notes pertaining to the use of this document
Purpose		• This 810 Utility Bill Ready Invoice Transaction Set is used to transmit a Billing Invoice to the Utility when a consolidated bill is to be rendered that will include ESCO charges 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).
Validation Field		• Transactions will be validated based on the customer's utility account number (with check digit, if included).
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. • A Cancel 810 Invoice transaction (BIG08=01) is not used in the Utility Bill Ready model. When usage is cancelled via an 867 Cancel transaction, neither the utility nor ESCO should send an 810 Cancel transaction to cancel the ESCO's charges. The utility will, however, in most instances send a new 867 Original transaction for the canceled period showing the corrected usage. A new Original 867 transaction may be sent for each period canceled by an 867 Cancel transaction or the new Original 867 transaction may contain restated usage for the entire cancellation period plus new usage for the current period (see the examples for illustrations of 810 Invoices containing canceled charges). • The ESCO has two options for handling their charges associated with a cancel period. They may choose to cancel their charges for the cancel period by transmitting, in a future 810 Original Invoice, the total amount of all canceled charges in a single SAC segment where SAC01 = "C" (Charge), SAC04 = ADJ010, and SAC05 = - xxxx.yy (total canceled charges) or they may choose not to cancel any previously billed amounts. • Both the billing (Utility) and non-billing (ESCO) parties must process all 867 MU Cancel transactions prior to processing 867MU original usage transactions.
Bill Messages		• Bill messages to be displayed on the ESCO's portion of the customer's consolidated bill may be communicated in two ways. Up to six (6) PID segments may be transmitted which contain either the actual text of the bill message or codes that the parties have previously agreed to associate with specific pre-approved bill messages. The method to be used for handling text messages is at the discretion of the Utility. • Where PID01 = F the ESCO sends a text message to be displayed on the ESCO portion of the customer's consolidated bill. Note: when actual text is being transmitted, a space should not be sent in the 80th character in a PID segment. • Where PID01 = S the ESCO sends codes to designate pre-defined text messages to be displayed on the customer's bill. • Under either method the total text associated with all messages to be printed on the customer's bill may not exceed 480 characters.

Beginning Balance and Total Outstanding Balance Segments		• If the customer had a balance with the ESCO prior to the switch to Utility Bill Ready Billing, and the ESCO wishes to display this balance on the customer's initial bill ready consolidated bill, they may send this information in a Beginning Balance segment (BAL~J9). When a customer has been on budget billing for the ESCO charges prior to the switch to Utility Bill Ready consolidated billing, the BAL~J9 segment should contain the amount of any budget plan installment payments owed from prior periods, if any and not the balance of actual charges based on usage billed to date. If sent, the amount in the beginning balance segment would increase the total amount due for the customer on the initial bill. • The 810 Invoice transaction contains a Total Outstanding Balance segment (BAL~YB) that can be used to communicate the current amount of the customer's outstanding balance with the ESCO. This information may be sent to ensure that balance information maintained by the billing party (Utility) for the customer's account with the non-billing party (ESCO) is consistent with the balance being maintained by the ESCO for that customer. The information sent in this segment will NOT be used for bill presentation purposes and this segment should only be sent when the Pay-As-You-Get Paid method is being used. • When a Beginning Balance segment was NOT sent on the initial 810 Invoice to the utility, that beginning balance amount must be excluded from the amount sent in the Total Outstanding Balance amount sent. • In the event that the Utility's outstanding balance for the ESCOs customer does not equal the ESCOs balance for that customer, after considering recent payments/adjustments, the Utility will contact the ESCO to resolve the discrepancy.
Payments/Refunds		• When the ESCO receives payment directly from the customer for its own charges, or issues it's customer a cash refund, the ESCO must inform the utility that a payment has been applied, or a refund has been issued, by sending a PAM segment in the 810 Invoice. The PAM segment must contain the amount of the payment applied, or refund issued, as well as the date the payment or refund was recorded by the ESCO on the customer's account. • When a customer inadvertently sends payment for a consolidated bill to the ESCO (non-billing party) instead of the Utility (billing party), the ESCO must contact the Utility immediately through non-EDI means.
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 unmetered 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.
Dates		• Period Start and End Dates are sent to describe the bill period associated with a specific charge or adjustment amount. All charges/adjustments sent in the same IT1 loop must pertain to the same period. When the non-billing party wants to send charges/adjustments that pertain to different time periods, for presentation on the consolidated bill, they must be sent in separate IT1 loops in order to associate each charge/allowance item with its specific time period. • The DTM segments should be sent except in instances in which an 810 Invoice is being generated in response to receipt of an 867MU transaction containing an Interim Bill Notice (refer to the *Consolidated Billing Business Processes – Utility Bill Ready* or notes for the *867MU Implementation Guide* or the *Monthly Usage Business Process Document* for a discussion of the Interim Bill Notice). • The period start date in the 810 should 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 should 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 Utility may agree to accept alternative start and/or end dates when charge information is being sent at the Meter or Unmetered level and the usage measurement period associated with a specific meter (or unmetered service) does not correspond to the earliest start date and the latest end date in the corresponding 867 MU transaction.
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 bill ready consolidated billing may establish the maximum number of charge amounts that may be accommodated on the ESCO's portion of the consolidated bill. 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 UNMETered 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.

SAC Segment		• This segment contains all Charges and/or Adjustments, other than tax amounts, to be 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.
		• Amounts billed in prior periods that are being canceled are sent in the current 810 invoice as a charge item (SAC01=C for 'Charge' and SAC04 = ADJ010) with the amount sent in SAC05 (see notes on 810 Original/Cancel above).
		• The codes sent in SAC04 in Utility Bill Ready categorize the charge amounts sent in the SAC05. In addition, these codes may also be used to communicate to the utility the text description that should be displayed for each SAC05 amount that will appear on the ESCOs portion of the consolidated bill. For bill presentation purposes, the standard text associated with each SAC04 code may be displayed on the customer's bill or a utility may permit the ESCO to designate the text description they would like to associate with each SAC04 code they intend to send. That non-standard text would be displayed on their customer's bills in lieu of the standard SAC04 text. The exact text to be associated with each SAC04 code must be mutually agreed upon by the utility and ESCO in advance. In addition, non-standard text descriptions may be sent in SAC15 when SAC04=TPI02 (ESCO Initiated Charges).
		• The SAC08, SAC09 and SAC10 may be sent when the ESCO would like quantity, unit of measure and rate information displayed on the bill for an amount sent in SAC05. When one is sent, they all must be sent. The quantity, unit and rate information would be displayed in addition to, and not in place of, the text description indicated by SAC04.

Budget Billing		• When the ESCOs customers are on budget billing, there are six (6) segments that will be sent to display budget billing information on the ESCO portion of the consolidated bill: ➢ BAL*Y*46 – Balance Detail (Budget Plan Cumulative Difference). This segment will contain the plan-to-date cumulative difference between actual charges based on usage and budget charges, ➢ BAL*Y*0S – Balance Detail (Budget Plan Actual Charges Billed to Date). This segment will contain the budget plan year cumulative actual charges accrued to date, ➢ BAL*Y*0R – Balance Detail (Budget Plan Installments Billed to Date). This segment will contain the cumulative budget plan year installments billed to date, and ➢ BAL*M*41 – Balance Detail (Budget Plan Current Month Difference). This segment will contain the current month difference between actual charges based on usage and budget charges. ➢ Multiple SLN loops with SAC segments which contain the following charges: ❖ <u>Current month budget bill charges</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 = 'C' for 'Charge' and SAC04 = BUD001 for 'Budget Bill charges'. ❖ <u>Budget Billing settlement charges</u> - This is the budget bill settlement amount that is sent when a budget plan is canceled or settled for the plan year. The budget bill settlement amount is the difference between the actual charges based on usage and the budget amounts paid over the life of the budget plan or the last settlement date. An SLN loop is sent with an SAC segment where SAC01 = 'C' for 'Charge' and SAC04 = BUD002 indicating that SAC05 contains a budget settlement amount. • When the customer is on budget billing for the ESCOs charges, the current months actual charges must be sent in an SAC segment where SAC01 = "N" (No Charge) and SAC04 contains the appropriate code to identify the nature of the current month's actual charge amounts sent in SAC05. Similarly, the current month's actual taxes for customer's on budget billing should be sent in a TXI segment where TXI07 = "O" so that the tax amounts are not included in the amount sent in the TDS segment.

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 recipient's 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*
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 would normally equal the total current months charges. In instances in which previously billed charges are being canceled in the transaction, the amount sent in the TDS segment is the net of the total charges for the current period plus or minus, as applicable, the canceled charge amounts.
Rejection		• An 810 Invoice transaction may be rejected for validation or syntax errors or when it is not received within the two-business day bill window 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). • Information sent in an 810 Invoice transaction should not be used to update the recipients' customer records. The 814 Account Maintenance (Change) transaction must be used to report and record changes in customers' 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 following documents should be reviewed where further clarification is needed: ➢ *Consolidated Billing Business Processes - Utility Bill Ready* ➢ *810 Utility BR Data Dictionary* ➢ *867MU Implementation Guide,* or ➢ *Monthly Usage Business Processes.* • 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

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:

This section shows the X12 Rules for this segment but the Usage and Max Use fields will also reflect NY rules. For Usage, "Optional (Must Use)" means that this segment is Optional for X12, but is required in NY. "Optional (Dependent)" means Optional for X12, but use is conditional in NY. The grayboxes below should also be reviewed for additional NY Rules.

Notes: Required

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

REF~12~011231287654398

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

One or more examples.

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 interv[illegible]g spaces or non-alphanumeric characters. (Characters added to aid [illegible]ible presentation on a bill, for example, should be removed)			

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 Bill 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 ESCO to the Utility when the Utility is presenting a consolidated bill to the customer using the Bill 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 (ESCO Customer Account Number)	O	1		
6	050	REF	Reference Identification (Utility Customer Account Number)	O	1		
7	050	REF	Reference Identification (Bill Presenter)	O	1		
8	050	REF	Reference Identification (Bill Calculator)	O	1		
			LOOP ID - N1			1	
9	070	N1	Name (ESCO)	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	160	PID	Product/Item Description (Text Messages)	O	6		
14	212	BAL	Balance Detail (Total Outstanding Balance)	O	1		
15	212	BAL	Balance Detail (Beginning Balance)	O	1		
16	212	BAL	Balance Detail (Budget Plan Cumulative Difference)	O	1		
17	212	BAL	Balance Detail (Budget Plan Actual Charges Billed to Date)	O	1		
18	212	BAL	Balance Detail (Budget Plan Installments Billed to Date)	O	1		
19	212	BAL	Balance Detail (Budget Plan Current Month Difference)	O	1		
20	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			30	
22	010	IT1	Baseline Item Data (Charge Level)	O	1		
24	040	TXI	Tax Information	O	10		
26	120	REF	Reference Identification (Meter Number)	O	1		
27	150	DTM	Date/Time Reference (Period Start Date)	O	1		

28	150	DTM	Date/Time Reference (Period End Date)	O	1	
			LOOP ID - SLN			25
29	200	SLN	Subline Item Detail (Item Counter)	O	1	
30	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
36	010	TDS	Total Monetary Value Summary	M	1		
37	070	CTT	Transaction Totals	O	1		n1
38	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** 810 Invoice	**M**	**ID 3/3**
Mand.	**ST02**	**329**	**Transaction Set Control Number** Identifying control number assigned by the originator of a transaction set. This identifier must be unique for each transaction set within a functional group.	**M**	**AN 4/9**

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~20020201~123567890120020201~~~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.			
Mand.	**BIG05**	**328**	**Release Number**		**O**	**AN 1/30**
			The cross-reference number originally transmitted in the BPT02 of the 867 Monthly Usage transaction.			
Mand.	**BIG07**	**640**	**Transaction Type Code**		**O**	**ID 2/2**
			ME	Memorandum		
				Regular Bill		
Mand.	**BIG08**	**353**	**Transaction Set Purpose Code**		**O**	**ID 2/2**
			00	Original		

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

This segment should be sent when the ESCO has assigned a unique account number for the customer and they would like that account number displayed on their portion of the customer's consolidated bill.
When this segment is not sent in the Invoice, the Utility will use the ESCO Customer Account Number of record (as previously supplied by the ESCO in an 814 Enrollment or 814 Change transaction).

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.		
Mand.	**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~12~011231287674398

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.		
Mand.	**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 (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

When either Bill Presenter (REF*BLT) or Bill Calculator (REF*PC) segments are missing or invalid, the transaction may be rejected.

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.		
Mand.	**REF02**	**127**	**Reference Identification**		**X**	**AN 1/30**
			LDC			

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

When either Bill Presenter (REF*BLT) or Bill Calculator (REF*PC) segments are missing or invalid, the transaction may be rejected.

REF~PC~DUAL

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.		
Mand.	**REF02**	**127**	**Reference Identification**		**X**	**AN 1/30**
			DUAL	Each Party Calculates its own charges.		
				BILL READY: The ESCO sends an 810 transaction to the Utility with bill ready ESCO charges fully calculated. Used when REFBLT = LDC.		

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~~24~123456789
N1~SJ~ESP COMPANY~24~123456789

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.			
Mand.	**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		
Mand.	**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~~24~123456789
N1~8S~UTILITY COMPANY~24~123456789

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 Utility. It is not necessary for successful completion of the transaction but may be provided by mutual agreement between trading partners.			
Mand.	**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		
Mand.	**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 the customer in this transaction.
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~MARY SMITH

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		
				N102 identifies the end use customer targeted by this transaction.		
Mand.	**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: **PID** **Product/Item Description (Text Messages)**
Position: 160
Loop:
Level: Heading
Usage: Optional (Dependent)
Max Use: 6
Purpose: To describe a product or process in coded or free-form format
Syntax Notes:
1 If PID04 is present, then PID03 is required.
2 At least one of PID04 or PID05 is required.
3 If PID07 is present, then PID03 is required.
4 If PID08 is present, then PID04 is required.
5 If PID09 is present, then PID05 is required.
Semantic Notes:
1 Use PID03 to indicate the organization that publishes the code list being referred to.
2 PID04 should be used for industry-specific product description codes.
3 PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4 PID09 is used to identify the language being used in PID05.
Comments:
1 If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2 Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3 PID07 specifies the individual code list of the agency specified in PID03.
Notes: Conditional

This segment may be sent when the ESCO would like a text message printed on their portion of the customer's consolidated bill. This segment may be used to send the actual text of the message or to send a code that the billing and non-billing party have previously agreed to associate with specific pre-approved text to be printed on the bill. Up to 6 PID segments may be sent but the actual text sent in the segments or the text indicated by the codes sent in the segment must be <= 480 characters.
The process for handling text messages for display on the ESCO portion of the consolidated bill, as well as the association of codes with specific messages, must be mutually agreed upon by the utility and ESCO in advance. The ESCO must provide at least 15 days advance notice when they want to change the specific text associated with a specific code.

PID~F~GEN~~~This is an example of a Text Message. Note that the punctuation is included and~R1
PID~F~GEN~~~ upper and lower case are used. Also note that the second message started with ~R2
PID~F~GEN~~~a space and that the third message is split in the middle of a word at 80 charac~R3
PID~F~GEN~~~ters.~R4
PID~F~GEN~~~A new message line can also be started.~R5

PID~S~GEN~~~M1010~R1
PID~S~GEN~~~M1011~R2

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Mand.	**PID01**	**349**	**Item Description Type**		**M ID 1/1**
			F	Free-form	
				This code is to be used when free form text is sent. Note that the party sending the message(s) text must send them exactly as they want them displayed and must consider where spaces need to occur when the message	

				exceeds 80 characters. For example, if the first line of text ends with a complete word at the 80th character, the second line of text should start with a space to continue the sentence. If the first line ends at the 80th character in the middle of a word, the second line picks up with the continuation of the word and the billing party should not insert a space or carriage return. Note: a space may not be sent in the 80th character in a PID segment.		
			S	Structured (From Industry Code List)		
				This code should be used when the text message can be indicated by reference to a code table, in lieu of transmitting the actual text message. The codes must be mutually agreed upon by the utility and ESCO in advance.		
Mand.	**PID02**	**750**	**Product/Process Characteristic Code**		**O**	**ID 2/3**
			GEN	General Description		
				This segment contains the non-billing party's messages or message codes. The billing party is only responsible for printing up to 480 total characters.		
Mand.	**PID05**	**352**	**Description**		**X**	**AN 1/80**
			Message Code or Text Message The full 80 characters may be used regardless of where a word may cut off but a space may not be sent in the last field of any PID segment (the 80th "character"). The next PID segment in a transaction should start at exactly the next character, whether that be a continuation of the word, or a space between words, or punctuation.			
Mand.	**PID06**	**752**	**Surface/Layer/Position Code**		**O**	**ID 2/2**
			This field is used to "order" the PID segments. The first 80 characters of the message are coded as R1, the next 80 as R2, etc.			
			R1	Relative Position 1		
			R2	Relative Position 2		
			R3	Relative Position 3		
			R4	Relative Position 4		
			R5	Relative Position 5		
			R6	Relative Position 6		

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

When the payment method is Pay-As-You-Get-Paid, this segment may be sent to the Utility in each Invoice transaction to synchronize the Utility's outstanding balance for this customer with the ESCOs balance. Recent payments will be taken into consideration. When the balance sent by the ESCO is inconsistent with the balance information maintained by the Utility for the ESCO account for the customer the transaction will not be rejected but the Utility will follow up with the ESCO to resolve discrepancies.

When the payment method is Purchased Receivables, this segment is not used.

When the ESCO did not send a beginning balance segment (see BAL*M*J9) to communicate the ESCOs accounts receivable balance for the customer at the initiation of bill ready consolidated billing, the balance amount sent in this segment must be reduced by the ESCOs beginning balance for their customer. This is to ensure that the ESCOs outstanding balance for their customer is consistent with the outstanding balance established by the utility for that customer's receivable balance with the ESCO.

BAL~M~YB~150 Outstanding balance is $150.00
BAL~M~YB~-150 Outstanding balance is a credit balance of $150.00
BAL~M~YB~129.2 Outstanding balance is $129.20

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		
				BAL03 should contain the customer's total outstanding balance. This is the amount owed from previous billing periods less actual payments applied plus the current period charges in this invoice. For customers on budget billing for the ESCO charges, the total outstanding balance is the amount of monthly budget plan installment payments owed from previous periods less payments applied plus the current budget plan installment payment.		
Mand.	**BAL03**	**782**	**Monetary Amount**		**M**	**R 1/18**
			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.			

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: Optional

When the customer is switching to bill ready consolidated billing and the Pay-As-You-Get-Paid method is being used, the ESCO may send this segment in its' initial 810 Invoice to the Utility to communicate their customer's balance, if any, prior to the switch to bill ready billing.

BAL~M~J9~50 Beginning balance is $50.00
BAL~M~J9~50.0 Beginning balance is $50.00
BAL~M~J9~50.00 Beginning balance is $50.00
BAL~M~J9~-50.00 Beginning balance is a credit of $50.00
BAL~M~J9~0.0 Beginning balance is zero

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**
			J9	Beginning Balance ESCO's Beginning Balance for the customer. For customer's on budget billing for the ESCO charges prior to the switch to utility bill ready consolidated billing, BAL03 should contain the amount of any budget plan installment payments owed from prior periods, if any and not the balance of actual charges based on usage billed to date.		
Mand.	**BAL03**	**782**	**Monetary Amount**		**M**	**R 1/18**
			Beginning 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.			

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

This segment must be sent when a residential customer is on Budget Billing for the ESCO's charges. This segment may also be sent for non-residential customers when the ESCO would like the information to be displayed on the customer's consolidated bill.

BAL~Y~46~-5.33 Cumulative difference between actual and budget amounts is a credit of $5.33
BAL~Y~46~40.22 Cumulative difference between actual and budget amounts is $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)		
				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 Actual Charges Billed to Date)**
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 must be sent when a residential customer is on Budget Billing for the ESCO's charges. This segment may also be sent for non-residential customers when the ESCO would like the information to be displayed on the customer's consolidated bill. This segment should be sent in conjunction with the BAL~Y~0R segment (Budget Plan Installments Billed to Date).

BAL~Y~0S~203.25 Actual charges billed to date under the current year's budget plan are $203.25.
BAL~Y~0S~-25.10 The balance of actual charges billed to date under the current year's budget plan is a credit of $25.10.

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**
			0S	Previously Billed		
				When the ESCOs customer is on Budget Billing, BAL03 will contain the sum of the customer's actual charges billed to date under the current year's budget plan. This amount, in conjunction with the amount transmitted in the BAL~ Y~0R segment (Budget Plan Installments Billed to Date) will be presented on the ESCOs portion of the consolidated bill.		
Mand.	**BAL03**	**782**	**Monetary Amount**		**M**	**R 1/18**
			Budget Plan Actual Charges Billed to Date 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 Installments Billed to Date)**
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 must be sent when a residential customer is on Budget Billing for the ESCO's charges. This segment may also be sent for non-residential customers when the ESCO would like the information to be displayed on the customer's consolidated bill. This segment should be sent in conjunction with the BAL~Y~0S segment (Budget Plan Actual Charges Billed to Date).

BAL~Y~0R~300
BAL~Y~0R~50.00

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**
			0R	Regular Plan		
				When the customer is on a Budget Plan for the ESCO's charges, BAL03 contains the cumulative budget plan installments billed to date for the current year's budget plan. This amount will be presented on the ESCO portion of the customer's consolidated bill in conjunction with the amount transmitted in the BAL~Y~0S segment (Budget Plan Actual Charges Billed to Date).		
Mand.	**BAL03**	**782**	**Monetary Amount**		**M**	**R 1/18**
			Budget Plan Installments Billed to Date 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

This segment must be sent when a residential customer is on Budget Billing for the ESCO's charges. This segment may also be sent for non-residential customers when the ESCO would like the information to be displayed on the customer's consolidated bill. This segment contains the difference between actual charges based on usage and the budget bill amount for the current month.

BAL~M~41~12.22
BAL~M~41~-45.63

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)		
				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 Month 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: **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

Required to communicate payments received or refunds issued by the non-billing party for its own charges, otherwise not used. An Invoice transaction may contain multiple PAM segments or no PAM segment.

In the event that the ESCO inadvertently received payment for the entire consolidated bill (including utility charges) the ESCO must contact the utility to resolve the issue.

This segment should NOT be used to communicate a charge for a security deposit or to indicate that a security deposit already collected has been applied to the customer's outstanding balance. Please see SAC04 codes DAB001 - DAB004.

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
Mand.	**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 should only be used when the ESCO has issued a cash refund (issued a check or otherwise transferred funds) to the customer. Waiver of previously billed amounts or a credit adjustment to correct for an overcharge should be sent in an SAC segment and not in the PAM segment. Refunds should be sent as a positive amount.	
			QZ	Payment Amount	

Mand.	**PAM05**	**782**	**Monetary Amount**	**X**	**R 1/18**
			Amount paid (typically negative) or refunded (typically positive) 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.		
Mand.	**PAM06**	**344**	**Unit of Time Period or Interval**	**X**	**ID 2/2**
			PD Period to Date		
Mand.	**PAM07**	**374**	**Date/Time Qualifier**	**X**	**ID 3/3**
			009 Process		
Mand.	**PAM08**	**373**	**Date**	**X**	**DT 8/8**
			Date the payment was posted or the refund was issued.		

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

Each 810 Invoice transaction must contain at least one IT1 loop and may contain multiple loops depending upon the nature of the charge information contained in a transaction. The IT109 element is used to distinguish between charge information that pertains to an Account versus charge data that is associated with a specific Metered or Unmetered Service Point.

ACCOUNT:

When an ESCO wants all charges/taxes to be displayed at an account level, one IT1 loop is sent for the entire account. Only one IT1 loop where IT109 = ACCOUNT may be sent in a transaction.

METER/UNMET:

When an ESCO wants certain charges/taxes to be displayed by service end point, one IT1loop (IT109=METER) is sent for each metered service end point and the meter number associated with that end point is transmitted in a REF~MG segment in the same loop.

Charges pertaining to unmetered service end points on an account would be sent in a separate IT1 loop (IT109=UNMET). REF~MG would not be sent when IT109=UNMET.

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

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Mand.	**IT101**	**350**	**Assigned Identification**	**O AN 1/20**
			A sequential line item counter used to differentiate between IT1 loops in a transaction.	

Mand.	**IT106**	**235**	**Product/Service ID Qualifier**		**X**	**ID 2/2**
			SV	Service Rendered		
Mand.	**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		
Mand.	**IT108**	**235**	**Product/Service ID Qualifier**		**X**	**ID 2/2**
			C3	Classification		
Mand.	**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 for all Unmetered Service Points		

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 ESCO wants the customer's bill to display 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~LS~8.5~.0425~~~~A~200.0
TXI~LS~6.03~0.06~~~~O~100.50

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**TXI01**	**963**	**Tax Type Code**		**M**	**ID 2/2**
			LS	State and Local Sales Tax		
Mand.	**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) 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 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. A leading decimal point should be sent for this element.			
Mand.	**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		

				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 The amount sent in TXI08 multiplied by the percent 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

Required when IT109 = METER, otherwise not used.

When the meter number provided does not match the information in the receiving parties records, the 810 Invoice 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** MG Meter Number	**M**	**ID 2/3**
Mand.	**REF02**	**127**	**Reference Identification** 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.	**X**	**AN 1/30**

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: Conditional

Period Start and End Dates should be provided except in instances in which an 810 Invoice is being generated in response to receipt of an 867MU transaction containing an Interim Bill Notice.

The period start date in the 810 should match the earliest period start date indicated in the QTY loop(s) of the corresponding 867.

If sending charges at a meter level, and the dates are different for each meter within the 867, the period start date expected here is still the earliest period start date of the 867, not the dates associated with each meter unless the utility and ESCO agree that alternative dates may be sent when charges are being sent at the detail level (either meter or unmetered).

DTM~150~20090106

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**DTM01**	**374**	**Date/Time Qualifier**		**M**	**ID 3/3**
			150	Service Period Start		
Mand.	**DTM02**	**373**	**Date**		**X**	**DT 8/8**

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: Conditional

Period Start and End Dates should be provided except in instances in which an 810 Invoice is being generated in response to receipt of an 867MU transaction containing an Interim Bill Notice.

In most instances the period end date in the 810 should match the latest period end date indicated in the QTY loops of the 867 transaction(s) corresponding to this Invoice. When the corresponding 867, however, contains usage for multiple bill periods, i.e. usage for several periods has been canceled and is now being restated, the latest period end date for the IT1 loop containing the adjustment for the canceled charges may not reflect the latest period end date sent in the 867 transaction (see transaction examples appended to this Implementation Guide).

If sending charges at a meter level, and the dates are different for each meter within the 867, the period end date expected here is still the latest period end date in the 867, not the dates associated with each meter unless the utility and ESCO agree that alternative dates may be sent when charges are being sent at the detail level (either meter or unmetered).

DTM~151~20090204

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes	
Mand.	**DTM01**	**374**	**Date/Time Qualifier**		**M**	**ID 3/3**
			151	Service Period End		
Mand.	**DTM02**	**373**	**Date**		**X**	**DT 8/8**

Segment: **SLN** **Subline Item Detail (Item Counter)**
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 1/20**
			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 code 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 (Dependent)
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:
Required to transmit charge data other than tax information.

The SAC segment is used to describe a specific charge/allowance item.

SAC~C~~GU~TPI002~601~~~~~~~~3~~Basic Service: 22 days@ $.2733
SAC~C~~EU~BUD001~4000~~~~~~~~1
SAC~N~~EU~BAS001~601~~~.2733~DA~22

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 sent in the SAC05 element is ignored when summing the invoice total in the TDS01 element.		
Mand.	**SAC03**	**559**	**Agency Qualifier Code**		**X**	**ID 2/2**
			EU	Electric Utilities		
			GU	Natural Gas Utilities		

Mand. SAC04 1301 Agency Service, Promotion, Allowance, or Charge Code X AN 1/10

The SAC04 codes are sent to categorize the charge amounts sent in the SAC05. In addition, these codes are also used to communicate to the utility the text description that should be displayed for each SAC05 amount that will appear on the ESCOs portion of the consolidated bill. For bill presentation purposes, these codes may be used in one of two ways. The standard text associated with each SAC04 code may be displayed on the customer's bill, for example when code BAS001 is sent, the text description "Customer Charge" would be displayed on the customer's bill.
Alternatively, a utility may permit the ESCO to designate the text description they would like to associate with each SAC04 code they intend to send. That non-standard text would be displayed on their customer's bills in lieu of the standard SAC04 text. For example, an ESCO may request that the text "Monthly Customer Charge" be displayed on the bill when they send code BAS001.
In addition, ESCO's may designate specific non-standardized text to be displayed on the customer's bill by sending code TPI002 in SAC04 and sending the actual text in SAC15.
The billing party will designate which SAC04 codes, from those shown below, may be used in their service territory as well as the maximum number of SAC05 amounts that may be sent in a single 810 transaction. The Billing Service Agreement must document whether standard or non-standard text descriptions will be used for bill presentation purposes and the extent to which non-standard text must be pre-approved.

ADJ002	Adjustment
ADJ007	Metering Adjustment
	Charge associated with a measurement adjustment
ADJ010	Total Canceled Charges
	In the event that the ESCO wants to cancel charges previously billed, this SAC04 code is sent to describe a single line item amount sent in SAC05 that represents the total amount of the charges being cancelled. This code must be sent in the IT109 = ACCOUNT Loop. This code is most often used when usage sent in prior periods must be corrected. In this instance, the ESCO would receive a cancel 867 transaction(s) from the Utility followed by a new 867(s) to correct the usage data previously sent. (See example transactions appended to this Implementation Guide.)
BAS001	Customer Charge
BAS002	Special Billing Charge
BAS004	Field Service Charge
BUD001	Current Budget Billing Charge
	SAC05 element contains the budget plan installment amount for the month. In the Utility Bill Ready scenario, the SAC01 must be "C" when using this code and actual charges that are not being added to the budget amount must use an "N" in SAC01.

BUD002	Budget Billing Settlement
	SAC05 contains the amount due from the customer to adjust previous amounts billed that have been blended into a budget billing arrangement; or, when either a budget arrangement has been cancelled or the budget plan year has ended and there is a net difference between actual charges and budget amounts paid. In the Utility Bill Ready scenario, the SAC01 must be "C" when using this code and actual charges that are not being added to the budget amount must use an "N" in SAC01.
COL001	Collection Charges
CRE001	Credit
CRE007	Energy Assistance Credit
	Federal , State or Local Energy assistance program
CRE010	Off Peak Credit
CRE011	Service Guarantee Credit
CRE024	On Peak Energy Credit
CRE025	Mid Peak Energy Credit
CRE026	Off Peak Energy Credit
CRE030	Assistance Program Participant Credit
DAB001	Deposit
DAB002	Deposit Interest
DAB003	Deposit Applied
DAB004	Deposit Reduction
DMD001	Demand Charge
DMD002	Contract Demand Charge
DMD006	Off Peak Demand
DMD007	On Peak Demand
DMD008	Intermediate Demand
DMD029	Shoulder
DSC001	Discount
DSC005	Energy Discount
DSC006	Church Discount
DSC007	Government Service Discount
DSC008	School Discount
DSC014	Courtesy Discount
DSC015	Referral Bonus
DSC016	Special Promotion
DSC017	Miscellaneous Promotion
ENC001	Energy Charge
ENC002	Energy Tier Charge
ENC003	Off Peak Charge
ENC039	On Peak
ENC043	Intermediate Peak Charge
FFR001	Non-Metered Service
INT001	Interest
INT003	ITC Adjustment Interest
	Interest paid to compensate for the time difference between billing correctly the first time and correcting later with an adjustment entry
LPC001	Late Payment Charge
MAD003	Minimum Contract
	Minimum customer can be billed under terms of power

	contract
MSC001	Miscellaneous Charge
MSC035	Special Billing Services
ODL001	Outdoor Lighting
ODL002	Street Lighting Charges
ODL003	Traffic Signals
RRR007	Interest on Refund
RTC001	Return Check Fee
	Charge associated with check returned from the bank
RTC002	Return Check Amount
	Rebilling of returned payment
SER001	Service Charge
	Charge for establishing account
SER003	Switching Fees
SMD001	Appliance Contract Installment
	Charge for installment payment on appliance service contract
SMD011	Other Services and Merchandise
SMD019	Special Meter Read
	Charge for an off-cycle meter read
TPI002	ESCO Initiated Line Items
	This code must be used when the ESCO wants non-standard text to be displayed on the bill for the amount sent in SAC05. The actual text to be displayed is sent in SAC15. This is the only code that may be used when non-standard text is being sent in SAC15 and use of this code is subject to the mutual agreement of the billing and non-billing parties.
TRS001	Transfer from Account to Account
	Monetary funds applied to an account by transferring from another account
TRS002	Transfer to Deposit Account
	Funds transferred to satisfy security deposit requirement

Mand. SAC05 610 Amount O N2 1/15

Charge/Adjustment Amount

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.

Cond.	SAC08	118	Rate	O	R 1/9

Rate Used to Calculate Charge/Adjustment

The SAC08, SAC09 and SAC10 elements are sent to provide the quantity, unit of measure and rate associated with the amount sent in SAC05. 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. For example, if the information to be displayed for an amount is: 392 kwh @ 0.05321/kwh then ".05321" is sent in SAC08, "KH" is sent in SAC09 and "392" is sent in SAC10.
Information about quantity, unit and rate would be displayed in addition to, and not in place of, the text description indicated by the code sent in SAC04.

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

When SAC08 and SAC10 are being sent, then SAC09 must also be sent. This element is sent when the ESCO would like quantity, unit of measure and rate information displayed on the bill for an amount sent in SAC05. If one of these elements is sent, they all must be sent.
Information about quantity, unit and rate would be displayed in addition to, and not in place of, the text description indicated by the code sent in SAC04.

For example, if the information to be displayed for an amount is : 392 kwh @ 0.05321/kwh then ".05321" is sent in SAC08, "KH" is sent in SAC09 and "392" is sent in SAC10

DA	Days
DO	Dollars, U.S.
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

Cond.	**SAC10**	**380**	**Quantity**	**X**	**R 1/15**
			Amount of Consumption or Quantity When SAC08 and SAC09 is being sent, SAC10 must be sent. This element is sent when the ESCO would like quantity, unit of measure and rate information displayed on the bill for an amount sent in SAC05. An SAC08 and 09 must be present if the SAC10 is sent. Information about quantity, unit and rate would be displayed in addition to, and not in place of, the text description indicated by the code sent in SAC04. For example, if the information to be displayed for an amount is : 392 kwh @ 0.05321/kwh then ".05321" is sent in SAC08, "KH" is sent in SAC09 and "392" is sent in SAC10 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.	**SAC13**	**127**	**Reference Identification**	**X**	**AN 1/30**
			This element is sent when the ESCO wants to communicate the order in which the amounts sent in SAC05 elements should be printed on the bill (01, 02, 03, ... 15, etc.) The use of print sequencing numbers in an 810 Invoice is at the discretion of the Utility. When print sequencing numbers are being used but no value is sent in SAC13, the Utility may print the charge amounts in any sequence. If IT109 = ACCOUNT, the sequence number pertains to all charges within the ACCOUNT loop. If IT109 = METER or UNMET, the sequence number pertains to the charges within each METER or UNMET loop.		
Cond.	**SAC15**	**352**	**Description**	**X**	**AN 1/80**
			This element is required when SAC04 = TPI002 (ESCO Initiated Line Items); otherwise it is not used. The text sent in SAC15 will be displayed on the customer's bill. Each utility may establish a maximum number of characters that may be sent in this element.		

Segment: **TDS** **Total Monetary Value Summary**
Position: 010
Loop:
Level: Summary
Usage: Mandatory
Max Use: 1
Purpose: To specify the total invoice discounts and amounts
Syntax Notes:
Semantic Notes:
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/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~2

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 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~37~000000001

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**

EXAMPLES

These examples are presented for illustrative purposes only. Although they are syntactically correct with respect to the published transaction standard for TS810 Utility Bill Ready Invoice, it should be understood that these examples reflect certain assumptions regarding optional and conditional data segments in this standard. Accordingly, these examples are not necessarily indicative of the manner in which a specific Utility would map a specific transaction. The assignment of print sequencing numbers to specific line item charges in the following scenarios are presented for illustrative purposes only. In New York the billing party has discretion over the format of the consolidated bill and may wish to designate the order in which line items will be presented in that section of the bill reserved for the non-billing parties' charges.

Scenario 1 –Budget Plan, Text Message using Codes, Purchase Receivables Method

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090206*20090206000678***867001504**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*KEYSPAN ENERGY DELIVERY*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*S*GEN***M10039*R1!	Text Message
PID*S*GEN***M10241*R2!	Text Message (continued)
BAL*Y*46*50.29!	Budget Plan Cumulative Difference is $50.29 - Actual charges exceed budget plan installments to date.
BAL*Y*0S*350.29!	Budget Plan Actual Charges Billed to Date total $350.29.
BAL*Y*0R*300.00!	Budget Plan Installments Billed to Date total $300.00.
BAL*M*41*20.42!	Budget Plan Current Month Difference. The difference between actual charges and the budget installment for the current month is $20.42.
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas Charge(s) billed at the ***account*** level
TXI*LS*3.44*.04****O*85.97!	Sales tax***;*** amount; rate; Tax is ***Information Only;*** basis on which the tax is calculated
DTM*150*20090105!	Billing period ***start*** date
DTM*151*20090204!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*N**GU*BAS001*295***2.95*MO*1***01!	No Charge Indicator, ***gas*** utility; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*N**GU*ENC001*8302***.466404*HH*178***02!	No Charge Indicator, ***gas*** utility; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment

SAC*C**GU*BUD001*6000***59.00*MO*1***03!	Charge Indicator; ***gas*** `utility`; charge type is ***Current Budget Billing Charge***; Amount; Rate; Unit of Measure; Quantity; Text Description
TDS*6000!	Total Budget charges
CTT*1!	Number of IT1 segments
SE*28*000001!	Transaction Set trailer; segment count; control number

Notes on Scenario 1:

This is a budget billed account and therefore, the actual charges and taxes are marked as “no charge” and “information only” respectively and are not included in the TDS amount.

Scenario 2 – Adjustment of 3 Monthly Invoices

Part A: Original Invoice 1 (Most Recent)

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*2009403*IN20090403_5675***867100315**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***THANK YOU for your timely payment*R1!	Text Message
BAL*M*YB*89.41!	Total Outstanding Balance
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas `Charge(s) billed at the` ***account*** `level`
TXI*LS*3.44*.04****A*85.97!	Sales tax`; amount; rate; Tax is` ***Additive;*** `basis on which the tax is calculated`
DTM*150*2009228!	Billing period ***start*** date
DTM*151*2009328!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*BAS001*295***2.95*MO*1***01!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**EU*ENC001*8302***.466404*HH*178***02!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*8941!	Total current month charges
CTT*1!	Number of IT1 segments
SE*22*000001!	Transaction Set trailer; segment count; control number

Scenario 2 – Adjustment of 3 Monthly Invoices
Part B: Original Invoice 2 (Second Most Recent)

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090305*IN20090305_0167***867100012**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***Note that your payment has not yet been received by us. If you haven't already*R1!	Text Message
PID*F*GEN***done so, please remit $58.24. If you have made a recent payment, THANK YOU.*R2!	Text Message
BAL*M*YB*133.58!	Total Outstanding Balance
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas `Charge(s) billed at the` ***account*** `level`
TXI*LS*2.9*.04****A*72.44!	Sales tax`; amount; rate; Tax is` ***Additive;*** `basis on which the tax is calculated`
DTM*150*20090130!	Billing period ***start*** date
DTM*151*20090227!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*BAS001*295***2.95*MO*1***01!	Charge Indicator, ***`electric or combination`*** `utility`; charge type is ***`Customer Charge`***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**EU*ENC001*6949***.466404*HH*149***02!	Charge Indicator, ***`electric or combination`*** `utility`; charge type is ***`Energy Charge`***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*7534!	Total current month charges
CTT*1!	Number of IT1 segments
SE*23*000001!	Transaction Set trailer; segment count; control number

Scenario 2 – Adjustment of 3 Monthly Invoices
Part C: Original Invoice 3 (Third Most Recent)

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090204*IN20090204_5397***867000097**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***THANK YOU for your timely payment. In the future, please be sure to remit payment*R1!	Text Message
PID*F*GEN***t directly to the utility at the address provided on your bill.*R2!	Text Message
BAL*M*YB*56.42!	Total Outstanding Balance
PAM****QZ*-40.25*PD*009*20020131!	Payment received by ESCO for their own charges.
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas Charge(s) billed at the ***account*** level
TXI*LS*2.17*.04****A*54.25!	Sales tax; amount; rate; Tax is ***Additive***; basis on which the tax is calculated
DTM*150*20081229!	Billing period ***start*** date
DTM*151*20090129!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*BAS001*295***2.95*MO*1***01!	Charge Indicator, ***electric or combination*** utility; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**EU*ENC001*5130***.466404*HH*110***02!	Charge Indicator, ***electric or combination*** utility; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*5642!	Total current month charges
CTT*1!	Number of IT1 segments
SE*24*000001!	Transaction Set trailer; segment count; control number

Scenario 2 – Adjustment of 3 Monthly Invoices
Part D: CORRECTED Invoice 1 (Most Recent)

When utility sends an 867 Original for each of the three new periods

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090420*IN20090420_0001***867114001**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***Please note that this invoice shows a credit for corrected usage.*R1!	Text Message
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas `Charge(s) billed at the` ***account*** `level`
TXI*LS*3.29*.04****A*82.24!	Sales tax`; amount; rate; Tax is` ***Additive;*** `basis on which the tax is calculated`
DTM*150*20090228!	Billing period ***start*** date
DTM*151*20090328!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*ADJ010*-8960***-89.41*EA*1***01!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Adjustment to Cancel Charges***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**EU*BAS001*295***2.95*MO*1***02!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment
SAC*C**EU*ENC001*7929***.466404*HH*170***03!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*-388!	Total current month charges
CTT*1!	Number of IT1 segments
SE*23*000001!	Transaction Set trailer; segment count; control number

Scenario 2 – Adjustment of 3 Monthly Invoices
Part E: CORRECTED Invoice 2 (Second Most Recent)

When utility sends an 867 Original for each of the three new periods

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090420*IN20090420_0002***867114002**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***Please note: this invoice shows an additional amount due for corrected usage.*R1!	Text Message
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas `Charge(s) billed at the` ***account*** `level`
TXI*LS*3.01*.04****A*75.24!	Sales tax`; amount; rate; Tax is` ***Additive;*** `basis on which the tax is calculated`
DTM*150*20090130!	Service period ***start*** date
DTM*151*20090227!	Service period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*ADJ010*-7534***-75.34*MO*1***01!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Adjustment to cancel charges***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*1**A!	Second SLN Segment
SAC*C**EU*BAS001*295***2.95*MO*1***02!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Third SLN Segment
SAC*C**EU*ENC001*7229***.466404*HH*155***03!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*291!	Total current month charges
CTT*1!	Number of IT1 segments
SE*23*000001!	Transaction Set trailer; segment count; control number

Scenario 2 – Adjustment of 3 Monthly Invoices
Part F: CORRECTED Invoice 3 (Third Most Recent)

When utility sends an 867 Original for each of the three new periods

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090420*IN20090420_0003***867114003**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***Please note that this invoice shows a credit for corrected usage.*R1!	Text Message
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas `Charge(s) billed at the` ***account*** `level`
TXI*LS*1.98*.04****A*49.59!	Sales tax`; amount; rate; Tax is` ***Additive;*** `basis on which the tax is calculated`
DTM*150*20081229!	Billing period ***start*** date
DTM*151*20090129!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*ADJ010*-5642***-56.42*MO*1***01!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Adjustment to cancel charges***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*1**A!	Second SLN Segment
SAC*C**EU*BAS001*295***2.95*MO*1***02!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Third SLN Segment
SAC*C**EU*ENC001*4664***.466404*HH*100***03!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*-485!	Total current month charges
CTT*1!	Number of IT1 segments
SE*23*000001!	Transaction Set trailer; segment count; control number

Scenario 2 – Adjustment of 3 Monthly Invoices

Part G: Current Month Invoice with all three months of CANCELED charges

When utility sends an 867 Original for each of the three new periods and an 867 for the current month charges

ST*810*000001!	Transaction Set header; transaction defined is an ***810***; control number assigned by originator
BIG*20090502*IN20090502_0315***867124012**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*526894GS!	ESCO assigned account number for the customer
REF*12*3456789!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*NYSEG*1*987693210!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*F*GEN***This corrected invoice backs out charges from 12/29/08 through 3/28/09. The new*R1!	Text Message
PID*F*GEN*** charges cover the corrected period and the current month (12/29/08 to 4/28/09).*R2!	Text Message
PID*F*GEN*** THANK YOU for your timely payment*R3!	Text Message
BAL*M*YB*7274!	Total Outstanding Balance
IT1*1*****SV*GAS*C3*ACCOUNT!	Gas `Charge(s) billed at the` ***account*** `level`
TXI*LS*11.67*.04****A*291.64!	Sales tax`; amount; rate; Tax is` ***Additive;*** `basis on which the tax is calculated`
DTM*150*20081229!	Billing period ***start*** date
DTM*151*20090428!	Billing period ***end*** date
SLN*1**A!	First SLN Segment
SAC*C**EU*ADJ010*-22136***-221.17*EA*1***01!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Adjustment to Cancel Charges***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*2**A!	Second SLN Segment
SAC*C**EU*BAS001*1180***2.95*MO*4***02!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Customer Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN Segment
SAC*C**EU*ENC001*27984***.466404*HH*600***03!	Charge Indicator, ***electric or combination*** `utility`; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*8214!	Total current month charges
CTT*1!	Number of IT1 segments
SE*26*000001!	Transaction Set trailer; segment count; control number

Scenario 3
Missed Bill Window - Invoice submitted in the following month
Part A: Previous Month Charges

ST*810*000001!	Transaction Set header; transaction defined is an 810; control number assigned by originator
BIG*20091106*20091106001***20091005-867-004 **ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*A64568970!	ESCO assigned account number for the customer
REF*12*0064467890!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*KEYSPAN ENERGY DELIVERY*1*987654321!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*S*GEN***M1390*R1!	Text Message
PID*S*GEN***M1391*R2!	Text Message
BAL*M*YB*82.95!	Total Outstanding Balance
IT1*1*****SV*GAS*C3*ACCOUNT!	***Gas*** Charge(s) billed at the ***account*** level
TXI*LS*3.38*.04****A*84.57!	***Sales tax***; amount; rate; Tax is ***Additive***; basis
DTM*150*20090907!	Billing period ***start*** date
DTM*151*20091005!	Billing period ***end*** date
SLN*1**A!	First SLN segment
SAC*C**GU*BAS001*295***2.95*MO*1***01!	Charge Indicator, ***gas*** utility; charge type is ***Basic Customer Charge***; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*2**A!	Second SLN segment
SAC*C**GU*ENC001*8162***.466404*HH*175*** 02!	Charge Indicator, ***gas*** utility; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
SLN*3**A!	Third SLN segment
SAC*C**GU*LPC001*-500***-5*EA*1***03!	Charge Indicator; ***gas*** utility; charge type is ***Late Payment Charge*** (notice it is a credit so it is a forgiveness of the LPC); Credit Amount; Rate; Unit of Measure; Quantity; Text Description
TDS*8295!	Total current charges
CTT*1!	Number of IT1 segments
SE*25*000001!	Transaction Set trailer; segment count; control number

Notes on Scenario 3 Part A: Previous Month Charges

Note that the same information is sent, just at a later date. A second 810 (see Part B) would be sent for the current month charges.

Scenario 3
Missed Bill Window - Invoice submitted in the following month
Part B: Current Month Charges

ST*810*000001!	Transaction Set header; transaction defined is an 810; control number assigned by originator
BIG*20091106*20091106348***20091105-867-231 **ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*A64568970!	ESCO assigned account number for the customer
REF*12*0064467890!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*KEYSPAN ENERGY DELIVERY*1*987654321!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*S*GEN***M0131*R1!	Text Message
PID*S*GEN***M0003*R2!	Text Message
BAL*M*YB*178.18!	Total Outstanding Balance
IT1*1*****SV*GAS*C3*ACCOUNT!	***Gas*** Charge(s) billed at the ***account*** level
TXI*LS*3.66*.04****A*91.57!	***Sales tax***; amount; rate; Tax is ***Additive***; basis
DTM*150*20091005!	Billing period ***start*** date
DTM*151*20091105!	Billing period ***end*** date
SLN*1**A!	First SLN segment
SAC*C**GU*BAS001*295***2.95*MO*1***01!	Charge Indicator, ***gas*** utility; charge type is ***Basic Customer Charge***; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*2**A!	Second SLN segment
SAC*C**GU*ENC001*8862***.466404*HH*190*** 02!	Charge Indicator, ***gas*** utility; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*9523!	Total current charges
CTT*1!	Number of IT1 segments
SE*23*000001!	Transaction Set trailer; segment count; control number

Scenario 4 – Invoice sent in response to an Interim Bill Notice

ST*810*000001!	Transaction Set header; transaction defined is an 810; control number assigned by originator
BIG*20091006*20091006001***20091005-867004IBN**ME*00!	Transaction date; Invoice number; Cross Reference Number; ***Regular*** Bill; ***Original*** Invoice
REF*11*A64568970!	ESCO assigned account number for the customer
REF*12*0064467890!	Utility assigned account number for the customer
REF*BLT*LDC!	Utility is Bill Presenter
REF*PC*DUAL!	Utility is Bill Calculator
N1*SJ*ESCO NAME*1*123456789!	ESCO Name and DUNS number
N1*8S*KEYSPAN ENERGY DELIVERY*1*987654321!	Utility Name and DUNS number
N1*8R*MARY JONES!	Customer Name
PID*S*GEN***M1690*R1!	Text Message
PID*S*GEN***M1191*R2!	Text Message
BAL*M*YB*87.95!	Total Outstanding Balance
IT1*1*****SV*GAS*C3*ACCOUNT!	***Gas*** Charge(s) billed at the ***account*** level
TXI*LS*3.38*.04****A*84.57!	***Sales tax***; amount; rate; Tax is ***Additive***; basis
SLN*1**A!	First SLN segment
SAC*C**GU*BAS001*295***2.95*MO*1***01!	Charge Indicator, ***gas*** utility; charge type is ***Basic Customer Charge***; Amount; Rate; Unit of Measure; Quantity; Text Description
SLN*2**A!	Second SLN segment
SAC*C**GU*ENC001*8162***.466404*HH*175***02!	Charge Indicator, ***gas*** utility; charge type is ***Energy Charge***; Amount; Rate; Unit of Measure; Consumption; Text Description
TDS*8795!	Total current charges
CTT*1!	Number of IT1 segments
SE*21*000001!	Transaction Set trailer; segment count; control number

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