

**Massachusetts
Gas
Implementation
Guideline**

For
Electronic Data Interchange

TRANSACTION SET

810

ESP Invoice

Ver/Rel 004010

810 Invoice

Functional Group ID=**IN**

Introduction:

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

Heading:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
M	010	ST	Transaction Set Header	M	1		
M	020	BIG	Beginning Segment for Invoice	M	1		
M	050	REF	LDC Account Number for Customer	M	12		
M	050	REF	Supplier Account Number for Customer	M	12		
Dep	050	REF	Meter Number	O	12		
LOOP ID - N1						200	
M	070	N1	LDC	M	1		
LOOP ID - N1						200	
M	070	N1	Supplier	M	1		

Detail:

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
LOOP ID - IT1						200000	
M	010	IT1	Invoice -- Account Level	M	1		
LOOP ID - SAC						25	
M	180	SAC	Service, Promotion, Allowance, or Charge Information -- Account Level	M	1		

Summary:

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

Transaction Set Notes

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

Segment: **ST** Transaction Set Header
Position: 010
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number
Syntax Notes:
Semantic Notes: 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).
Comments:
Notes: ST*810*0000001

Data Element Summary

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

Segment: **BIG** Beginning Segment for Invoice
Position: 020
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Syntax Notes:

- Semantic Notes:**
- 1 BIG01 is the invoice issue date.
 - 2 BIG03 is the date assigned by the purchaser to purchase order.
 - 3 BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

Comments: 1 BIG07 is used only to further define the type of invoice when needed.

Notes: BIG*19990201*19990201123500001***2048392934504**PR*00

Data Element Summary

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	BIG01	373	Date	M DT 8/8
			Date expressed as CCYYMMDD	
			The transaction creation date - the date that the data was processed by the sender's application system.	
M	BIG02	76	Invoice Number	M AN 1/22
			Identifying number assigned by issuer	
			A unique transaction identification number assigned by the originator of this transaction. This number must be unique over time.	
M	BIG07	640	Transaction Type Code	M ID 2/2
			Code specifying the type of transaction	
			ME Memorandum	
M	BIG08	353	Transaction Set Purpose Code	M ID 2/2
			Code identifying purpose of transaction set	
			00 Original	

Segment: **REF** LDC Account Number for Customer
Position: 050
Loop:
Level: Heading
Usage: Mandatory
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

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

Semantic Notes:

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

Comments:
Notes: REF*12*39205810578

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 12 Billing Account LDC assigned account number for end use customer	M ID 2/3
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Account Number	M AN 1/30

Segment: **REF** Supplier Account Number for Customer
Position: 050
Loop:
Level: Heading
Usage: Mandatory
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

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

Semantic Notes:

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

Comments:
Notes: REF*11*395871290

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification 11 Account Number Supplier assigned account number for end use customer	M ID 2/3
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Account Number	M AN 1/30

Segment: **REF** Meter Number
Position: 050
Loop:
Level: Heading
Usage: Optional (Dependent)
Max Use: 12
Purpose: To specify identifying information
Syntax Notes:

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

Semantic Notes:

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

Comments:
Notes:

At least one meter number must be provided for validation purposes for Bay State and Berkshire.
REF*MG*1234567

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification MG Meter Number	M ID 2/3
M	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier Meter Number	M AN 1/30

Segment: N1 LDC
Position: 070
Loop: N1 Mandatory
Level: Heading
Usage: Mandatory
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: N1*8S*LDC COMPANY*1*007909411**40 (as Receiver)
 N1*8S*LDC COMPANY*9*0079094110001**40 (as Receiver)

Data Element Summary

Ref.	Data Element	Name	Attributes
M	N101	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 8S Consumer Service Provider (CSP) LDC	M ID 2/3
M	N102	93 Name Free-form name This is the LDC's name.	M AN 1/60
M	N103	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	M ID 1/2
M	N104	67 Identification Code Code identifying a party or other code This is the DUN & Bradstreet Number with or without the +4.	M AN 2/80
M	N106	98 Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual 40 Receiver	M ID 2/3

Segment: **N1 Supplier**
Position: 070
Loop: N1 Mandatory
Level: Heading
Usage: Mandatory
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: N1*SJ*ESP COMPANY*9*0079094220001**41(as Sender)
 N1*SJ*ESP COMPANY*1*007909422**41 (as Sender)

Data Element Summary

Ref.	Data Element	Name	Attributes
M	N101	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		SJ Service Provider	
		Supplier	
M	N102	93 Name	M AN 1/60
		Free-form name	
		This is the Supplier's name.	
M	N103	66 Identification Code Qualifier	M ID 1/2
		Code designating the system/method of code structure used for Identification Code (67)	
		1 D-U-N-S Number, Dun & Bradstreet	
		9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	
M	N104	67 Identification Code	M AN 2/80
		Code identifying a party or other code	
		This is the DUN & Bradstreet Number with or without the +4.	
M	N106	98 Entity Identifier Code	M ID 2/3
		Code identifying an organizational entity, a physical location, property or an individual	
		41 Submitter	

Segment: **IT1 Invoice -- Account Level**
Position: 010
Loop: IT1 Mandatory
Level: Detail
Usage: Mandatory
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: This IT1 Loop is used to convey charges and taxes that apply to the entire account. IT1 Loops may be sent in any order; however, there may be only ONE IT1 Account Loop. Required if there are charges associated with the account.

IT1*001*****SV*GAS*C3*ACCOUNT

Data Element Summary

Ref.	Data			
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>	
M	IT101	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation within a transaction set Sequential line item counter.	
M	IT106	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			SV	Service Rendered
M	IT107	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			GAS	Gas Service
M	IT108	235	Product/Service ID Qualifier	M ID 2/2
			Code identifying the type/source of the descriptive number used in Product/Service ID (234)	
			C3	Classification
M	IT109	234	Product/Service ID	M AN 1/48
			Identifying number for a product or service	
			ACCOUNT	Indicates that charges pertain to the account level.

Segment: SAC Service, Promotion, Allowance, or Charge Information -- Account Level
Position: 180
Loop: SAC Mandatory
Level: Detail
Usage: Mandatory
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: Only one SAC is allowed for adjustments

SAC*C**GU*TPI002*100.00

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	SAC01	248	Allowance or Charge Indicator Code which indicates an allowance or charge for the service specified C Charge	M ID 1/1
M	SAC03	559	Agency Qualifier Code Code identifying the agency assigning the code values GU Natural Gas Utilities	M ID 2/2
M	SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code Agency maintained code identifying the service, promotion, allowance, or charge TPI002 Energy Services Supplier initiated line items	M AN 1/10
M	SAC05	610	Amount Monetary amount	M N2 1/15

This amount must be signed if negative. Whether an amount is negative is NOT determined by SAC01.

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: TDS*9875

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
M	<u>Des.</u> TDS01	<u>Element</u> 610 <u>Amount</u> Monetary amount	M N2 1/15
Note: 9875 represents \$98.75 - there is an implied decimal.			

Segment: **CTT Transaction Totals**
Position: 070
Loop:
Level: Summary
Usage: Mandatory
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: CTT*5

Data Element Summary

Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	CTT01	354 Number of Line Items	M N0 1/6
		Total number of line items in the transaction set	
		The number of IT1 segments.	

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

Syntax Notes:

Semantic Notes:

Comments: 1 SE is the last segment of each transaction set.

Notes: SE*35*00000001

Data Element Summary

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