



TECO Energy

EDI Implementation Guide

Transaction Set
810 - Utility to Customer
Version 4010.3

Jan 17, 2017

Summary of Changes

August 24, 2001	Version 1.0 - Initial Release 810 y. 4010
May 07, 2009	Version 1.0— Initial Release 810 y. 4010.1
Dec 09, 2016	Version 1.0 – Initial Release 810 y. 4010.2
Jan 12, 2017	Removed Amount Qualifier Code of YB from Balance Detail segment on page 15. BAL*P*YB and BAL*M*YB are not provided. Updated SAC04 for Agency Service, Promotion, Allowance or Charge Code on page 28 Updated TDS segment for more clarification on page 34 Updated SAC04 for Agency Service, Promotion, Allowance or Charge Code on page 36 Added separate DUNS Number for Electric and Gas bills in N104 on page 11

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.

Functional Group ID = **IN**

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>
	ISA	Interchange Control Header	M			
	GS	Functional Group Header	M	>1		
M	010	ST	M			
M	020	BIG	M			
	050	REF	O	12		
		LOOP ID – N1			200	
	070	N1	O			
	080	N2	O	2		
	090	N3	O	2		
	100	N4	O			
	130	ITD	O	>1		
	212	BAL	O	>1		
	214	PAM	O	>1		
		POP ID – N9				
	240	N9	O			
	250	MSG	O	10		

Detail:

<u>Pos. No</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des</u>	<u>Max Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
		LOOP ID - IT1			200000	
010	IT1	Baseline Item Data (Invoice)	O			
059	MBA	Measurements	O	40		
120	REF	Reference Identification	O	>1		
150	DTM	Date/Time Reference	O	10		
230	SAC	Service, Promotion, Allowance, or Charge Information	O	25		
		LOOP ID – N1			200	
240	N1	Name	O	1		
260	N3	Address Information	O	2		
270	N4	Geographic Location	O	1		

Summary:

	<u>Pos. No.</u>	<u>Seq. 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		
			LOOP ID – SAC			25	
	040	SAC	Service, Promotion, Allowance, or Charge Information	O			
	050	TXI	Tax Information	O	10		
	070	CTT	Transaction Totals	O			n 1
M	080	SE	Transaction Set Trailer	M			
		GE	Functional Group Trailer	M	>1		
		TEA	Interchange Control Trailer	M			

Transaction Set Notes

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: **ISA** Interchange Control Header

Position:

Loop:

Level:

Usage:

Max Use:

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments.

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

<u>Ref. Des</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
ISA01	I01	Authorization Information Qualifier	M ID 2/2
ISA02	I02	Authorization Information	M AN 10/10
ISA03	I03	Security Information Qualifier	M ID 2/2
ISA04	I04	Security Information	M AN 10/10
ISA05	I05	Interchange ID Qualifier	M ID 2/2 01
ISA06	I06	Interchange Sender ID 006924286E-Production 006924286ET-Test	M AN 15/15
ISA07	I05	Interchange ID Qualifier	N ID 2/2
ISA08	I07	Interchange Receiver ID	M AN 15/15
ISA09	I08	Interchange Date	M DT 6/6
ISA10	I09	Interchange Time	M TM 4/4
ISA11	I10	Interchange Control Standards Identifier	M ID 1/1
ISA12	I11	Interchange Number Control Version	M ID 5/5 00401
ISA13	I12	Interchange Control Number	M NO 9/9
ISA14	I13	Acknowledgement Requested	M ID 1/1
ISA15	I14	Usage Indicator T for Test P for Production	M ID 1/1
ISA16	I15	Component Element Separator	M AN 1/1

Segment: **GS** Functional Group Header

Position:

Loop:

Level:

Usage:

Max Use:

Purpose: To indicate the beginning of a functional group and to provide control information.

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
GS01	479	Functional Identifier Code	M ID 2/2
GS02	142	Application Sender's Code 006924286E for Production 006924286ET for Test	M AN 2/15
GS03	124	Application Receiver's Code	M AN 2/15
GS04	373	Date	M DT 6/6 /Z
GS05	337	Time	M TM 4/8 /Z
GS06	28	Group Control Number	M NO 1/9 /Z
GS07	455	Responsible Agency Code X-X12	M ID 1/2
GS08	480	Version/Release Code Identifier 004010	M AN 1/12

Segment: **ST** Transaction Set Header

Position: 010

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of a functional group and to provide control information.

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:

Data Element Summary

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

Segment: **BIG** Beginning Segment for Invoice

Position: 020

Loop:

Level: Heading

Usage: Mandatory

Max Use: 1

Purpose: To indicate the beginning of an invoice transactions set and transmit identifying numbers and dates.

Syntax Notes:

Semantic Notes: 1 BIG01 is the invoice issue date.

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

Data Element Summary

	<u>Ref.</u> <u>Des</u>	<u>Data.</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	BIG01	373	Date Date expressed as CCYYMMDD	M DT 8/8
M	BIG02	76	Invoice Identifying Invoice number assigned by issuer (TECO/PGS)	M AN 1/22
	BIG04	324	Purchase Order Number Utility	O AN 1/24
	BIG07	640	Transaction Type Code Code Specifying the type of transaction FB Final Bill PR Product (or Service)	O AN 2/2
	BIG08	353	Transaction Set Purpose Code Code specifying purpose of transaction set 00 Original 07 Duplicate C0 Corrected	O ID 2/2

Segment: **REF** Reference Identification
Position: 050
Loop:
Level: Heading
Usage: Optional
Max Use: 12
Purpose: To specify identifying information.
Syntax Notes:
Semantic Notes: 1 At least one of REF02 or REF03 is required.
Comments:

Data Element Summary

	<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	REF01	128	Reference Identification Qualifier Code Qualifying the Reference Identification	M ID 2/3
			12 Billing Account Account number under which Billing is rendered	
			00 Utility-assigned account number for the end use customerOriginal Invoice Number when BIG08=C0	
			45 Legacy Account Number	
	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30
	REF03	352	Description A free-form description to clarify the related data elements and their content	X AN 1/80

Segment: **N1 Name**
Position: 070
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code.
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is presented, 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.

Data Element Summary

	<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code Code identifying an organizational entity, location, property or an individual BT Bill-to-Party Used when directly billing the end use customer RE Party to receive Remittance	M ID 2/3
	N102	93	Name Free-form name TECO for N101 = RE	X AN 1/60
	N103	66	Identification Code Qualifier Code designating the system/method of code structure used for identification code 1 D-U-N-S Number, Dun & Bradstreet	X ID 1/2
	N104	67	Identification Code Code identifying a party or other code. DUNS Number Electric -> 006924286 Gas -> 785629820	X AN 2/80

Segment: **N2 Additional Name Information**

Position: 080

Loop: N1

Level: Heading

Usage: Optional

Max Use: 2

Purpose: To specify additional names or those longer than 60 characters in length.

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

	<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N201	93	Name Account Name/ Free Form Name	M AN 1/60
	N202	93	Name Account ID at Trading Partner	M AN 1/60

Segment: **N3** Address Information

Position: 090

Loop: N1

Level: Heading

Usage: Optional

Max Use: 2

Purpose: To specify the location of the named party.

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

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

Segment: N4 Geographic Location

Position: 100

Loop: N1

Level: Heading

Usage: Optional

Max Use: 1

Purpose: To specify the geographic place of the named party.

Syntax Notes:

Semantic Notes:

Comments: 1 A combination of either N401 through N405, or N405 and N406 may be adequate to specify a location.
2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	AN 2/30
N402	156	State or Province Code Code (standard State/Province) as defined by appropriate government agency	ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	ID 3/15
N404	26	Country Code Code identifying the country	ID 2/3

Segment: **ITD** Terms of Sale / Deferred Terms of Sale

Position: 130

Loop:

Level: Heading

Usage: Optional

Max Use: >1

Purpose: To specify terms of sale

Syntax Notes:

Semantic Notes:

Comments: 1 If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

Data Element Summary

<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
ITD01	336	Terms Type Code 05 Discount not applicable	0 ID 2/2
ITD02	333	Terms Basis Date Code 4 Specified date	0 ID
ITD06	446	Terms Net Due Date Date when total invoice amount becomes due expressed in format CCYYMMDD. Payment Due Date	0 DT 8/8

Segment: **BAL** Balance Detail
 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:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M BAL01	951	Balance Type Code Code indicating the type of balance	M ID 1/2
		M Current Month Billed, payment and balance amounts showing the BAL03 are in the billing period.	
		P Previous Month Billed, payment and balance amounts shown in BAL03 are for the period prior to this billing period.	
M BAL02	522	Amount Qualifier Code Code to qualify amount	M ID 1/3
		PB Billed amount *P*PB used to display invoice amount of previous month	
		TP Total payment amount *M*TP used to display total payment amounts made in this billing period.	
M BAL03	782	Monetary Amount Monetary amount	M R 1/18

Segment: **PAM** Period Amount

Position: 214

Loop:

Level: Heading

Usage: Optional

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 PM05 or PAM14 is required.
- 3 If either PAM06 or PAM07 is present, then the other is required.
- 4 If PAM07 is present, then at least one of PAM08 or PAM09 is required.
- 5 If PAM07 is present, then PAM06 is required.
- 6 if PAM08 is present, then PAM07 is required.

Semantic Notes:

Comments: This segment is used when historical consumption data must accompany the invoice.

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
PAM01	673	Quantity Qualifier Code Specifying the type of quantity 99 Quantity used Quantity of units used	X ID 2/2
PAM02	380	Quantity Numeric value of quantity	X R 1/15
PAM03	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand Represents a potential power load measured at predetermined intervals. KH Kilowatt Hours TD Therms CF Cubic Feet	M ID 2/2
PAM06	344	Unit of Time Period of Interval Code indicating the time period or internal AD Average Daily	X ID 2/2
PAM07	374	Data/Time Qualifier Code specifying the type of date or time, or both date and time. 194 Period End Date	X ID 3/3
PAM08	373	Date Date expressed as CCYYMMDD	X DT 8/8

Segment: **N9** Reference Number
Position: 240
Loop: N9
Level: Detail
Usage: Optional
Max Use: 1
Purpose: To transmit identifying numbers and descriptive information as specified by the reference number qualifier. At least one of N902 or N903 is required.

Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
M	N901	128	Reference Qualifier ZZ Mutually Defined	
	N903	369	Description Regulatory/Informational message	

Segment: **MSG** Message Text

Position: 250

Loop: N9

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To provide a free-form, format that would allow the transmission of text information

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
MSG01	933	Free-form Message Text	M AN 1/264

Segment: IT1 Baseline Item Data (Invoice)

Position: 010

Loop: IT1

Level: Detail

Usage: Optional

Max Use: 1

Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions.

Syntax Notes: 1 If any of IT102, IT103 or IT104 is present, then all are required.
2 If either IT106 or IT107 is present, then the other is required.
3 If either IT108 or IT109 is present, then the other is required.
4 If either IT110 or IT111 is present, then the other is required.

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/services IDs for each item.
For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

Data Element Summary

<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
IT101	350	Identification Alphanumeric characters assigned for differentiation within a transaction set. Line Item Counter	O AN 1/20
IT102	358	Quantity Invoiced	X R 1/15
IT103	355	Unit or Basis for Measurement Code EA Each KH Kilowatt Hour TD Therms	M ID 2/2
IT104	212	Unit Price	M R 1/14
IT106	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234). SV Service Rendered	X ID 2/2
IT107	234	Product/Service ID Identifying number for a product or service. Electric Billing for non-metered items Billing for non-energy items Gas	X AN 1/48

IT108	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234)	X ID 2/2
IT109	234	Product/Service ID Identifying number for a product or service Meter Unmet Account	X AN 1/48
IT110	235	Product/Service ID Qualifier Code identifying the type/source of the descriptive number used in Product/Service ID (234). IT110 and IT111 are used only if IT109=METER MB Measurement Type Code	X ID 2/2
IT111	234	Product/Service ID Identifying number for a product or service NT = Non-time of Use Measurement TOU = Time of Use Measurement	X AN 1/48

Segment: **MEA Measurements**

Position: 059

Loop: IT1

Level: Detail

Usage: Optional

Max Use: 40

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances, and weights (See Figures Appendix for example of use of 0001).

Syntax Notes:

- 1 At least one of MEA03 MEA05 MEA06 or MEA08 is required.
- 2 If MEA05 is present, then MEA04 is required.
- 3 If MEA06 is present, then MEA04 is required.
- 4 If MEA07 is present, then at least one of MEA03 MEA05 or MEA06 is required.
- 5 Only one of MEA08 or MEA03 may be present.

Semantic Notes: 1 MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments: 1 When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Data Element Summary

<u>Ref. Des</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
MEA01	737	Measurement Reference ID Code Code identifying the broad category to which a measurement applies AA Meter Reading - Beginning actual/ Ending Actual AE Meter reading - Beginning actual/ ending Estimated AV Average Reading EA Meter reading- Beginning estimated/ ending actual FE Meter Reading- Beginning estimate/ ending estimated TI Time CF Conversion Factor	0 ID 2/2
MEA02	739	Measurement Qualifier MU Multiplier It was generally agreed that the meter multiplier should be shown in its own MEA segment.	0 ID 1/3
MEA03	358	Quantity Invoiced	X R 1/15

MEA04	355	Unit or Basis for Measurement Code Code specifying the units in which a value is being expressed. Or manner in which a measurement has been taken. DA Days KH Kilowatt Hour K1 Kilowatt Demand Represents potential power load measured at predetermined intervals. K3 Kilovolt Amperes Reactive Hour TD Therms TZ MCF CF Cubic feet BY BTU Factor	M ID 2/2
MEA05	740	Range Minimum The value specifying the minimum of the measurement range. Beginning Read	X R 1/20
MEA06	741	Range Maximum The value specifying the maximum the measurement range. Ending Read	X R 1/20
MEA07	935	Measurement Significance Code Code used to benchmark, qualify or further define a measurement value 41 Off Peak 42 On Peak	O ID 2/2

Comments: REF03 contains data relating to the value cited in REF02

PG-C-WHTS	Gas	Wholesale Transport Service
PG-I-CIST	Gas	Contract Interruptible Svc - Transport
PG-I-GS1	Gas	General Service 1 (GS1)
PG-I-GS2	Gas	General Service 2 (GS2)
PG-I-GS3	Gas	General Service 3 (GS3)
PG-I-GS4	Gas	General Service 4 (GS4)
PG-I-GS5	Gas	General Service 5 (GS5)
PG-I-GT1	Gas	General Service 1 - Transportation
PG-I-GT2	Gas	General Service 2 - Transportation
PG-I-GT3	Gas	General Service 3 - Transportation
PG-I-GT4	Gas	General Service 4 - Transportation
PG-I-GT5	Gas	General Service 5 - Transportation
PG-I-IS	Gas	Interruptible Service
PG-I-ISLV	Gas	Interruptible Service - Large Volume
PG-I-ISLVT	Gas	Interruptible Svc Lrg Volume - Transp
PG-I-IST	Gas	Interruptible Svc - Transportation
PG-I-SIS	Gas	Small Interruptible Service
PG-I-SITS	Gas	Small Interruptible Transportation Svc
PG-L-CSLS	Gas	Comm Street Lighting Service (CSLS)
PG-L-CTSL	Gas	Comm Transportation Street Lighting
PG-R-RG1	Gas	General Service 1
PG-R-RG2	Gas	General Service 2
PG-R-RG3	Gas	General Service 3
PG-R-RGT1	Gas	General Service 1 - Transportation
PG-R-RGT2	Gas	General Service 2 - Transportation
PG-R-RGT3	Gas	General Service 3 - Transportation
PG-R-RS1	Gas	Residential Service RS-1
PG-R-RS2	Gas	Residential Service RS-2
PG-R-RS3	Gas	Residential Service RS-3
PG-R-RSG	Gas	Residential Standby Generator Svc
PGCU-CNG	Gas	CNG - Company Use (8888)
PGCU-GS	Gas	General Service - Company Use (8888)
TE-C-CS	Electric	Construction Service
TE-C-CSTUG	Electric	Construction Service - TUG
TE-C-GS	Electric	General Service - Non Demand
TE-C-GSD	Electric	General Service Demand - Standard
TE-C-GSDO	Electric	General Service-Demand - Optional
TE-C-GSDT	Electric	General Service Demand -Time of Day
TE-C-GST	Electric	General Service Non-Demand -Time Of Day
TE-C-GSUM	Electric	General Service - Unmetered
TE-C-IS	Electric	Interruptible Service
TE-C-IST	Electric	Interruptible Service - Time-of-Day
TE-C-SBF	Electric	Firm Standby and Supplemental Service
TE-C-SBFT	Electric	Firm Standby and Supplemental - TOD
TE-C-SBI	Electric	Interruptible Standby and Supplemental
TE-C-SBIT	Electric	Interruptible Standby and Supp. - TOD
TE-C-ZAPCP	ZapCap	TEC Commercial ZapCap
TE-I-GS	Electric	General Service Non-Demand - Standard

TE-I-GSD	Electric	General Service Demand - Standard
TE-I-GSDO	Electric	General Service Demand -Optional
TE-I-GSDT	Electric	General Service Demand -Time of Day
TE-I-GST	Electric	General Service Non-Demand - Time of Day
TE-I-GSUM	Electric	General Service - Unmetered
TE-I-IS	Electric	Interruptible Service
TE-I-IST	Electric	Interruptible Service - Time of Day
TE-I-SBF	Electric	Firm Standby and Supplemental - Stnd
TE-I-SBFT	Electric	Firm Standby and Supplemental - TOD
TE-I-SBI	Electric	Interruptible Standby and Supplemental
TE-I-SBIT	Electric	Interruptible Standby and Supp. - TOD
TE-L-LS1	Electric	Lighting Service
TE-R-RS	Electric	Residential Service
TE-R-RSD	Electric	General Service Demand
TE-R-RSVP	Electric	Residential Service Variable Service
TE-R-ZAPCP	ZapCap	Residential ZapCap
TECU-CS	Electric	Construction Service - Company Use
TECU-GS	Electric	General Service - Company Use
TECU-GSD	Electric	General Service Demand - Company Use
TECU-GSDO	Electric	GSD Optional - Company Use
TECU-LS1	Electric	Lighting Service - Company Use
TECU-RS	Electric	Residential Company Use

Segment: **DTM** Date/Time Reference

Position: 150

Loop: IT1

Level: Detail

Usage: Optional

Max Use: 10

Purpose: To specify pertinent dates and times.

Syntax Notes: 1 At least one of DTM02 DTM03 or DTM05 is required.
2 If DTM04 is present, then DTM03 is required.
3 If either DTM05 or DTM06 is present, then the other is required.

Semantic Notes:

Comments:

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	DTM01	374	Date/ Time Qualifier Code specifying type of date or time, or both date and time. 186 Invoice Period Start 187 Invoice Period End Next 634 Next Scheduled Read Date	M ID 3/3
	DTM02	634	Date Meter Read date Date expressed CCYYMMDD	X DT 8/8

SAC Service, Promotion, Allowance, or Change Information

Segment:
Position: 230
Loop: SLN
Level: Detail
Usage: Optional
Max Use: 25
Purpose: To request or identify a service, promotion, allowance, or change to specify the amount or percentage for the service, promotion, allowance, or change.

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.

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.

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.

Data Element Summary

	<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>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 A Allowance C Charge	M ID 1/1
	SAC03	559	Agency Qualifier Code Code identifying the agency assigning the code values EU Electric Utilities GU Gas Utilities	X ID 2/2

SAC04 1301

Agency Service, Promotion, Allowance, or Charge Code

X AN 1/10

Agency maintained code identifying the service, promotion, allowance, or charge

ADM000	ADMIN CHARGES
BAS001	BASIC CUSTOMER CHARGE
CAP000	CAPACITY CHARGE
CRE004	TRANSFORMER CREDIT
CRE004	STANDBY GENERATOR CREDIT
DIS000	DISTRIBUTION CHARGE
DMD000	LOCAL FACILITIES RESERVATION
DMD000	DEMAND CHARGE ON PEAK
DMD000	POWER SUPPLY RESERVATION CAPACITY
DMD000	POWER SUPPLY RES CONSERVATION
DMD000	POWER SUPPLY DEMAND CAPACITY
DMD000	POWER SUPPLY DEMAND
DMD000	SUPPLEMENTAL CAPACITY
DMD000	SUPPLEMENTAL DEMAND
DMD000	SUPPLEMENTAL ONPEAK DEMAND
DMD000	SUPPLEMENTAL ENERGY CONSERVATION
DMD001	DEMAND CHARGE
ECO000	ENERGY CONSERVATION CHARGE
ENC000	STANDBY OFFPEAK ENVIRONMENTAL
ENC000	STANDBY ONPEAK ENVIRONMENTAL
ENC000	ENERGY CHARGE OFF PEAK
ENC000	ENERGY CHARGE ON PEAK
ENC000	ENERGY CHARGE ON/OFF PEAK
ENC000	STANDBY ENERGY OFF-PEAK
ENC000	STANDBY ENERGY ONPEAK
ENC000	SUPPLEMENTAL ENVIRONMENTAL OFFPEAK
ENC000	SUPPLEMENTAL ENVIRONMENTAL ONPEAK
ENC000	SUPPLEMENTAL ENERGY OFFPEAK
ENC000	SUPPLEMENTAL ENERGY ONPEAK
ENC001	ENERGY CHARGE
ENV000	ENVIRONMENTAL COST RECOVERY
FUE001	FUEL CHARGE
FUE002	ON PEAK FUEL
FUE003	OFF PEAK FUEL
GLM001	INTERRUPTIBLE SUPPLY DEMAND CREDIT
GLM002	POWER SUPPLY RESERVATION CREDIT
IMB000	IMBALANCE CHARGE
ODL002	LIGHTING SERVICES
PFA001	POWER FACTOR ADJUSTMENT
PGA000	PGA TRUE UP
PRJ000	MEP/MSEA CHARGE
SMD000	SALES/MERCHANDISE
SWG000	GAS SWING CHARGE

SAC05	610	Amount Monetary amount The code used in SAC01 does not indicate the sign of the SAC05 amount in SAC05. The amount shown in may be either positive or negative; if negative, the minus sign "-", must be transmitted.	O N2 1/15
SAC06	378	Percent Qualifier Z Mutually Defined	X ID 1/1
SAC07	332	Allowance or Charge Percent	X R 1/6
SAC08	118	Allowance or Charge Rate	O R 1/9
SAC09	355	Unit or Basis for Measurement Code ZZ Mutually Defined KH Kilowatt Hour K1 Kilowatt Demand Represents potential power load measured at predetermined intervals. K3 Kilovolt Amperes Reactive Hour TD Therms TZ MCF CF Cubic feet	X ID 2/2
SAC10	380	Quantity	X R 1/15
SAC15	352	Description A free-form description to clarify the related data elements and their content.	X AN 1/80

Segment: **N1** Name
Position: 240
Loop: N1
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To identify a party by type of organization, name, and code.
Syntax Notes: 1 At least one of N102 or N103 is required.
2 If either N103 or N104 is presented, then the other is required.
Semantic Notes: 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.
Comments: Service Address

Data Element Summary

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property, or an individual MQ Metering Location	M ID 2/3
	N102	93	Name Free-form name	X AN 1/60

Segment: **N3** Address Information

Position: 260

Loop: N1

Level: Heading

Usage: Optional

Max Use: 2

Purpose: To specify the location of the named party.

Syntax Notes:

Semantic Notes:

Comments: Service Address

Data Element Summary

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

Segment: **N4 Geographic Location**

Position: 270

Loop: N1

Level: Heading

Usage: Optional

Max Use: 1

Purpose: To specify the geographic place of the named party.

Syntax Notes:

Semantic Notes:

- Comments:**
- 1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
 - 2 N402 is required only if city name (N401) is in the U.S. or Canada.

Data Element Summary

<u>Ref. Des</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name Free-form text for city name	0 AN 2/30
N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency	0 ID 2/2
N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	0 ID 3/15
N404	26	26 Country Code Code identifying the country	0 ID 2/3

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

Comments:

TDS will be equal to Sum of all SAC and TXI segments.
In case of credit balance with Remittance party, TDS will be equal to
sum of all SAC and TXI segments + BAL*P*PB - BAL*M*TP

Data Element Summary

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

SAC Service, Promotion, Allowance, or Change Information

Segment:

Position: 040

Loop: SAC

Level: Summary

Usage: Optional

Max Use: 1

Purpose: To request or identify a service, promotion, allowance, or change to specify the amount or percentage for the service, promotion, allowance, or change.

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.

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.

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.

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 A Allowance C Charge	M ID 1/1
	SAC03	559	Agency Qualifier Code identifying the type of service EU- Electric Utilities GU- Gas Utilities	X ID 2/2

SAC04	1301	Agency Service Promotion, Allowance, or Charge Code Agency Agency maintained code identifying the promotion, service, allowance, or charge ADJ000 WRITE-OFF ADJ000 ACCOUNT MAINTANENCE ADJ000 ADJUSTMENT CRE000 GOODWILL DAB001 DEPOSIT DAB002 DEPOSIT INTEREST DAB003 DEPOSIT APPLIED H00001 SERVICE CONNECTION CHARGE H00001 CONVERTED CONNECTION CHARGES LPC001 LATE PAYMENT CHARGE LPC001 CONVERTED LATE PAYMENT CHARGE MSC001 MISC CHARGE RCS001 RECONNECT CHARGE RT01 RETURN CHECK FEE RT01 CONVERTED RETURN CHECK FEE RT02 RETURN CHECK AMOUNT RT02 CONVERTED RETURN AMOUNT SUR002 FRANCHISE FEE TRS001 TRANSFER FROM ACCOUNT TO ACCOUNT TRS002 TRANSFER FROM ACCOUNT TO ACCOUNT TRS003 TRANSFER FROM ACCOUNT TO ACCOUNT TRS004 TRANSFER FROM ACCOUNT TO ACCOUNT TRS005 TRANSFER FROM ACCOUNT TO ACCOUNT VCR000 VOLUNTARY PLEDGE CONTRIBUTION PRB001 UNPAID PREVIOUS BALANCE	X AN 1/10
SAC05	610	Amount Monetary amount The code used in the SAC01 does not indicate the sign of the amount in SAC05. The amount shown in SAC05 may be either positive or negative; if negative, the minus sign, "-", must be transmitted.	O N2 1/15
SAC08	118	Allowance or Charge Rate	O R 1/9
SAC09	355	Unit or basis for Measurement Code	X ID 2/2
SAC10	380	Quantity	X R 1/15
SAC15	352	Description A free-form description to clarify the related data elements and their content	X AN 1/80

Segment: **TXI** Tax Information

Position: 050

Loop: SAC

Level: Summary

Usage: Optional

Max Use: 10

Purpose: To specify tax information.

Syntax Notes: 1 At least one of TX102 TX103 or TX106 is required.
2 If either TX104 or TX105 is present, then the other is required.
3 If TX108 is present, then TX103 is required.

Semantic Notes: 1 TX102 is the monetary amount of the tax.
2 TX103 is the tax percent expressed as a decimal.
3 TX107 is a code indicating the relationship of the price or amount to the associated segment

Comments:

Data Element Summary

	<u>Ref.</u> <u>Des</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
M	TX101	963	Tax Type Code Code specifying the type of tax GR Gross Receipts Tax LS State and Local Sales Tax MP Municipal Tax ST State Sales Tax	M ID 2/2
	TX102	782	Monetary Amount Monetary amount	X R 1/18

Segment: CTT Transaction Totals

Position: 070

Loop: SAC

Level: Summary

Usage: Optional

Max Use: 1

Purpose: To transmit a hash total for a specific element in the transaction set.

Syntax Notes:

Semantic Notes:

Comments: 1 This segment is intended to provide hash totals to validate transaction completeness and correctness.

Data Element Summary

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

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 completeness and correctness.

Data Element Summary

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

Segment: **GE** Group Trailer

Position:

Loop:

Level:

Usage:

Max Use:

Purpose: To indicate the end of a functional group and to provide control information.

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
GE01	97	Number of Transactions Included	M N0 1/10
GE02	28	Group Control Number	M AN 4/9

Segment: **IEA** Interchange Control Trailer

Position:

Loop:

Level:

Usage:

Max Use:

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments.

Syntax Notes:

Semantic Notes:

Comments:

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
ISA01	116	Number of Included Functional Groups	M N0 1/05
ISA02	112	Interchange Control Number	M N0 9/9