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:

	Pos. No.	Seg. <u>ID</u>	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BIG	Beginning Segment for Invoice	M	1		
Must Use	050	REF	Reference Identification - Activity Code	O	1		
Must Use	050	REF	Reference Identification - Billing Option	O	1		
	050	REF	Reference Identification - Billing Cycle	O	1		
			LOOP ID - N1			1	
Must Use	070	N1	Name - Distribution Company	О	1		
			LOOP ID - N1			1	
Must Use	070	N1	Name - Supplier	О	1		
Must Use	140	DTM	Date/Time Reference - Billing Date	О	1		'

Detail:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
		_	LOOP ID - IT1			200000	
Must Use	010	IT1	Baseline Item Data (Invoice)	О	1		
	040	TXI	Tax Information - Current Sales Tax	O	1		
	059	MEA	Measurements - Total Non TOU	O	1		
	059	MEA	Measurements - Peak kwh	O	1		
	059	MEA	Measurements - Peak kw	O	1		
	059	MEA	Measurements - Peak Kva	O	1		
	059	MEA	Measurements - Offpeak kwh	O	1		
	059	MEA	Measurements - Offpeak kw	O	1		
	059	MEA	Measurements - Offpeak Kva	O	1		
	059	MEA	Measurements - Shoulder kwh	O	1		
	059	MEA	Measurements - Shoulder kw	O	1		
	059	MEA	Measurements - Shoulder Kva	O	1		
	059	MEA	Measurements - Demand Value	O	1		
	059	MEA	Measurements - Number Non-Metered Units	O	1		
Must Use	120	REF	Reference Identification - Disco Account	O	1		
Must Use	120	REF	Reference Identification - Supplier Account	O	1		
	120	REF	Reference Identification - Type of Service	O	1		
	120	REF	Reference Identification - Supplier Rate	O	1		
	120	REF	Reference Identification - Service Identifier	O	1		
	120	REF	Reference Identification - Pricing Structure	O	1		
	120	REF	Reference Identification - Primary Metering Indicator	O	1		
Must Use	150	DTM	Date/Time Reference - Current Read	O	1		
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	pshire	EDI GUI	IDELINES			
Must Use 150 DTM			Date/Time Reference - Previous Read	O	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Non TOU	0	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Current Peak	0	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Current Off-Peak	0	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Current Shoulder	O	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Current Demand	0	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Supplier Arrears	O	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Arrears Interest	0	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	
			LOOP ID - SLN			1
	200	SLN	Subline Item Detail - Current Customer Charge	О	1	
	230	SAC	Service, Promotion, Allowance, or Charge Information	0	1	

Summary:

	Pos.	Seg.		Req.		Loop	Notes and
	No.	ID	Name	Des.	Max.Use	Repeat	Comments
Must Use	010	TDS	Total Monetary Value Summary	M	1		
	070	CTT	Transaction Totals	O	1		n1
Must Use	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

Must Use	Ref. Des. ST01	Data Element 143		Set Identifier Code y identifying a Transaction Set		ributes ID 3/3
			810	Invoice		
Must Use	ST02	329	Transaction	Set Control Number	M	AN 4/9
			Identifying co	ontrol number that must be unique within	n the transac	tion set
			functional gro	oup assigned by the originator for a tran	saction set	

Segment: BIG Beginning Segment for Invoice

PR

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

Data Element Summary

Must Use	Ref. <u>Des.</u> BIG01	Data Element 373	Name Date Date expressed as CCYYMMDD		ributes DT 8/8
Must Use	BIG02	76	Invoice Number Identifying number assigned by issuer	M	AN 1/22
			The Utility will send a unique reference identifier.		
Must Use	BIG07	640	Transaction Type Code Code specifying the type of transaction BD Statement of Balance Due	0	ID 2/2

Product (or Service)

Segment: REF Reference Identification - Activity Code

Position: 050

Loop:

Level: Heading

Usage: Optional (Must Use)

Max Use: 1

Purpose: To specify identifying information

			Data	Liement Summary		
	Ref.	Data				
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
Must Use	REF01	128	Reference Io	lentification Qualifier	\mathbf{M}	ID 2/3
			Code qualify	ing the Reference Identification		
			\mathbf{BE}	Business Activity		
Must Use	REF02	127	Reference Id	lentification	\mathbf{X}	AN 1/30
				formation as defined for a particular Transaction the Reference Identification Qualifier	ı Set o	or as

Segment: **REF** Reference Identification - Billing Option

Position: 050

Loop:

Level: Heading

Usage: Optional (Must Use)

Max Use: 1

Must Use

Purpose: To specify identifying information

Data Element Summary

Ref. Data

Des.ElementNameAttributesREF01128Reference Identification QualifierM ID 2/3

Code qualifying the Reference Identification

BLT Billing Type

Identifies whether the bill is consolidated by the LDC or ESP or whether each party will render their

own bill.

Must Use REF02 127 Reference Identification X AN 1/30

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

LDC - The Utility bills the customer Complete
DUAL - Each party bills the customer Passthrough

Segment: Reference Identification - Billing Cycle

Position: 050

Loop:

Level: Heading Usage: Optional

Max Use: 1

Purpose: To specify identifying information

Data Element Summary

Ref. Data Des. Element Name **Attributes Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification BF **Billing Center Identification** Billing Cycle. Cycle number when the billing will be rendered. REF02 127 **Must Use Reference Identification** X AN 1/30

Must Use REF02 127 Reference Identification X AN 1/30
Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier

Segment: $\underline{N1}$ Name - Distribution Company

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

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	N101	98	Entity Identifier C	ode	M	ID 2/3
			Code identifying an individual	organizational entity, a physical location	, proj	perty or an
			8S	Consumer Service Provider (CSP)		
				Utility		
	N102	93	Name		X	AN 1/60
			Free-form name			
Must Use	N103	66	Identification Code	e Qualifier	\mathbf{X}	ID 1/2
			Code designating the Code (67)	e system/method of code structure used f	or Id	entification
			1	D-U-N-S Number, Dun & Bradstreet		
Must Use	N104	67	Identification Code	e	X	AN 2/80
			Code identifying a p	party or other code		

Segment: Name - Supplier

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

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	N101	98	Entity Identifier Co	ode	M	ID 2/3
			Code identifying an	organizational entity, a physical location	, proj	perty or an
			individual			
			SJ	Service Provider		
				Energy Service Provider		
	N102	93	Name		X	AN 1/60
			Free-form name			
Must Use	N103	66	Identification Code	e Qualifier	\mathbf{X}	ID 1/2
			Code designating the	e system/method of code structure used for	or Ide	entification
			Code (67)			
			1	D-U-N-S Number, Dun & Bradstreet		
Must Use	N104	67	Identification Code	9	\mathbf{X}	AN 2/80
			Code identifying a p	party or other code		

Segment: DTM Date/Time Reference - Billing Date

Position: 140

Loop:

Level: Heading

Usage: Optional (Must Use)

Max Use: 1

Purpose: To specify pertinent dates and times

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualifier Code specifying type of date or time, or both date and time	$\overline{\mathbf{M}}$	ributes ID 3/3
			434 Statement		
Must Use	DTM05	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and	X time for	ID 2/3 mat
			D8 Date Expressed in Format CCYY	MMDD	
Must Use	DTM06	1251	Date Time Period Expression of a date, a time, or range of dates, times or of	X ates and	AN 1/35 times

Segment: <u>IT1</u> Baseline Item Data (Invoice)

Position: 010

Loop: IT1 Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use:

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

transactions

Notes: The typical usage of the IT1 entails including all usage and charges attributed to

one meter; in this case, the IT1 loop is qualified with "METER" in the IT108/IT109 pair. In the case where some charges are not attributed to a specific meter, for example, basic customer charge or late payment charge the IT1 loop is qualified with "ACCOUNT" in the IT108/IT109 pair. An 810 invoice may contain both "METER" and "ACCOUNT" IT1 loops.

A Meter IT1 loop can be mapped differently, depending on whether Time-of-Use (TOU) or straight meter measurement is employed. With a TOU measurement, multiple MEA segments will convey the usage, with the MEA07 in each MEA providing the TOU classification. The IT1 loop for a non-TOU or straight meter measurement will contain a single MEA segment with no MEA07.

			Data Elem	ent Summary		
	Ref. Des.	Data <u>Element</u>	<u>Name</u>			<u>ributes</u>
Must Use	IT101	350	•	ation acters assigned for differentiation within a		AN 1/20 saction set
			Line item counter			
Must Use	IT106	235	Product/Service II Code identifying the Product/Service ID SV	e type/source of the descriptive number us		ID 2/2
Must Use	IT107	234	Product/Service II Identifying number ELECTRIC	for a product or service	X	AN 1/48
Must Use	IT108	235	Product/Service II Code identifying the Product/Service ID C3	e type/source of the descriptive number us		ID 2/2
Must Use	IT109	234	Product/Service II Identifying number ACCOUNT METER UNMET	for a product or service Account Model Meter Model Unmetered Services	X	AN 1/48
D	IT110	235	Product/Service II Code identifying the Product/Service ID	Qualifier e type/source of the descriptive number us		ID 2/2
			MB	Measurement Type Code		
D	IT111	234	Product/Service II Identifying number	for a product or service	X	AN 1/48
			NT	Non-Time of Use Measurement		
			TOU	Time of Use Measurement		
Must Use	IT112	235	Product/Service ID IT112 and IT113 a	e type/source of the descriptive number us	ed in	
			but the actual met	or readings will flot be provided.		

Must Use IT113 234 Product/Service ID X AN 1/48

Identifying number for a product or service

NR = No reads will be presented

NR No Reads

Segment: TXI Tax Information - Current Sales Tax

Position: 040

Loop: IT1 Optional

Level: Detail Usage: Optional

Max Use: 1

Purpose: To specify tax information

Notes: Taxes included in this position are based on level indicated in IT109 for

determining tax charges applicability.

Data Element Summary

Ref. Data Element <u>Name</u> **Attributes** Des. **Must Use** TXI01 963 **Tax Type Code** M ID 2/2 Code specifying the type of tax SU Sales and Use Tax **Must Use** TXI02 **782 Monetary Amount** X R 1/18 Monetary amount **Must Use TXI07** 662 **Relationship Code** O ID 1/1 Code indicating the relationship between entities

A Add

The amount in TXI02 should be added when

summing the invoice total.

Segment: MEA Measurements - Total Non TOU

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figures of use)	Appendix for examples
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being ex which a measurement has been taken	pressed, or manner in
			KH Kilowatt Hour	
Must Use	MEA07	935	Measurement Significance Code Code used to benchmark, qualify or further define a m	O ID 2/2 neasurement value
			51 Total	

Segment: MEA Measurements - Peak kwh

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref. Des.	Data <u>Element</u>	<u>Name</u>	Attı	<u>ributes</u>
Must Use	MEA03	739	Measurement Value	X	R 1/20
			The value of the measurement		
	MEA04	C001	Composite Unit of Measure	X	
			To identify a composite unit of measure (See Figures Apper of use)	dix f	or examples
Must Use	C00101	355	Unit or Basis for Measurement Code	\mathbf{M}	ID 2/2
			Code specifying the units in which a value is being expressed which a measurement has been taken KH Kilowatt Hour	l, or 1	nanner in
Must Use	MEA07	935	Measurement Significance Code	O	ID 2/2
			Code used to benchmark, qualify or further define a measure	ment	value
			42 On Peak		

Segment: MEA Measurements - Peak kw

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref. Des.	Data <u>Element</u>	Name	<u>Attı</u>	<u>ributes</u>		
Must Use	MEA03	739	Measurement Value	X	R 1/20		
			The value of the measurement				
	MEA04	C001	Composite Unit of Measure	X			
			To identify a composite unit of measure (See Figures Appen of use)	ndix f	or examples		
Must Use	C00101	355	Unit or Basis for Measurement Code	\mathbf{M}	ID 2/2		
			Code specifying the units in which a value is being expressed, or n which a measurement has been taken K1 Kilowatt Demand				
Must Use	MEA07	935	Measurement Significance Code	0	ID 2/2		
			Code used to benchmark, qualify or further define a measure	ement	value		
			42 On Peak				

Segment: MEA Measurements - Peak Kva

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref.	Data Floment	Nama	Attributes
Must Use	Des. MEA03	<u>Element</u> 739	Name Magazanana Valua	
Must Use	WIEAU3	139	Measurement Value	X R 1/20
			The value of the measurement	
	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figure of use)	es Appendix for examples
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being e which a measurement has been taken K2 Kilovolt Amperes Reactive D	
			•	
Must Use	MEA07	935	Measurement Significance Code	O ID 2/2
			Code used to benchmark, qualify or further define a	measurement value
			42 On Peak	

Segment: MEA Measurements - Offpeak kwh

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref. Des.	Data <u>Element</u>	Name	Attı	<u>ributes</u>
Must Use	MEA03	739	Measurement Value	X	R 1/20
			The value of the measurement		
	MEA04	C001	Composite Unit of Measure	\mathbf{X}	
			To identify a composite unit of measure (See Figures Apper of use)	dix f	or examples
Must Use	C00101	355	Unit or Basis for Measurement Code	M	ID 2/2
			Code specifying the units in which a value is being expressed which a measurement has been taken KH Kilowatt Hour	l, or 1	nanner in
Must Use	MEA07	935	Measurement Significance Code	O	ID 2/2
			Code used to benchmark, qualify or further define a measure	ment	value
			41 Off Peak		

Segment: MEA Measurements - Offpeak kw

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref. Des.	Data Element	Name	Attı	ributes
Must Use	MEA03	739	Measurement Value	X	R 1/20
			The value of the measurement		
	MEA04	C001	Composite Unit of Measure	X	
			To identify a composite unit of measure (See Figures Apper of use)	ıdix fo	or examples
Must Use	C00101	355	Unit or Basis for Measurement Code	M	ID 2/2
			Code specifying the units in which a value is being expressed which a measurement has been taken K1 Kilowatt Demand	d, or r	nanner in
Must Use	MEA07	935	Measurement Significance Code Code used to benchmark, qualify or further define a measure	O ement	ID 2/2 value
			41 Off Peak		

Segment: MEA Measurements - Offpeak Kva

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref. Des.	Data <u>Element</u>	Name	Attı	<u>ributes</u>		
Must Use	MEA03	739	Measurement Value	X	R 1/20		
			The value of the measurement				
	MEA04	C001	Composite Unit of Measure	X			
			To identify a composite unit of measure (See Figures Apper of use)	ndix f	or examples		
Must Use	C00101	355	Unit or Basis for Measurement Code	\mathbf{M}	ID 2/2		
			Code specifying the units in which a value is being expressed, or many which a measurement has been taken				
			K2 Kilovolt Amperes Reactive Demand				
Must Use	MEA07	935	Measurement Significance Code	O	ID 2/2		
			Code used to benchmark, qualify or further define a measure	ment	value		
			41 Off Peak				

Segment: MEA Measurements - Shoulder kwh

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref.	Data		
	Des.	Element	<u>Name</u>	Attributes
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figures A of use)	Appendix for examples
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being exp which a measurement has been taken KH Kilowatt Hour	pressed, or manner in
Must Use	MEA07	935	Measurement Significance Code	O ID 2/2
Musi Use	WILAU/	933	Code used to benchmark, qualify or further define a me	
			66 Sales	

Segment: MEA Measurements - Shoulder kw

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref. Des.	Data <u>Element</u>	Name	<u>Att</u> ı	<u>ributes</u>		
Must Use	MEA03	739	Measurement Value	\mathbf{X}	R 1/20		
			The value of the measurement				
	MEA04	C001	Composite Unit of Measure	X			
			To identify a composite unit of measure (See Figures Appear of use)	ndix f	or examples		
Must Use	C00101	355	Unit or Basis for Measurement Code	\mathbf{M}	ID 2/2		
			Code specifying the units in which a value is being expressed, or which a measurement has been taken K1 Kilowatt Demand				
Must Use	MEA07	935	Measurement Significance Code Code used to benchmark, qualify or further define a measure	O ement	ID 2/2 value		
			66 Sales				

Segment: MEA Measurements - Shoulder Kva

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

	Ref.	Data	·	
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	MEA03	739	Measurement Value	X R 1/20
			The value of the measurement	
	MEA04	C001	Composite Unit of Measure	X
			To identify a composite unit of measure (See Figures A of use)	ppendix for examples
Must Use	C00101	355	Unit or Basis for Measurement Code	M ID 2/2
			Code specifying the units in which a value is being expr which a measurement has been taken	
			K2 Kilovolt Amperes Reactive Dema	and
Must Use	MEA07	935	Measurement Significance Code	O ID 2/2
			Code used to benchmark, qualify or further define a mea	asurement value
			66 Sales	

Segment: MEA Measurements - Demand Value

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

Must Use	Ref. Des. MEA03	Data Element 739	Name Measuremen The value of t	t Value he measurement		ibutes R 1/20
	MEA04	C001	Composite U	X		
			To identify a of use)	composite unit of measure (See Figure	es Appendix fo	r examples
Must Use	C00101	355		for Measurement Code	=:=	ID 2/2
				ng the units in which a value is being our court is being our court in the court is the court in the court is the court in	expressed, or m	anner in
			K1	Kilowatt Demand		
					_	
			K2	Kilovolt Amperes Reactive D	emand	
Must Use	MEA07	935		t Significance Code benchmark, qualify or further define a	_	ID 2/2 value
			62	Current		

Segment: MEA Measurements - Number Non-Metered Units

Position: 059

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify physical measurements or counts, including dimensions, tolerances, variances,

and weights (See Figures Appendix for example of use of C001)

Must Use	Ref. <u>Des.</u> MEA01	Data Element 737	Name Measurement Reference ID Code Code identifying the broad category to which a measure	Attributes O ID 2/2 ment applies
			BC Billed Actual	
Must Use	MEA03	739	Measurement Value The value of the measurement	X R 1/20
	MEA04	C001	Composite Unit of Measure	X
Must Use	C00101	355	To identify a composite unit of measure (See Figures A of use) Unit or Basis for Measurement Code Code specifying the units in which a value is being expression which a measurement has been taken UN Unit	M ID 2/2

Segment: REF Reference Identification - Disco Account

Position: 120

Loop: IT1 Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use: 1

Purpose: To specify identifying information

Data Element Summary

Ref. Data Des. Element Name **Attributes Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification 12 **Billing Account** Utility-assigned account number for the end use customer. REF02 **Must Use** 127 **Reference Identification** X AN 1/30 Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

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 ${\sf REF}$ Reference Identification - Supplier Account **Segment:**

Position: 120

> Loop: IT1 Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use:

Purpose: To specify identifying information

Data Element Summary

Ref. Data Des. Element Name **Attributes Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification 11 **Account Number** Energy Service Provider-assigned account number for the end use customer. REF02 **Must Use** 127 **Reference Identification** X AN 1/30 Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Position: 120

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify identifying information

Must Use	Ref. <u>Des.</u> REF01	Data Element 128		lentification Qualifier ing the Reference Identification	Att. M	ributes ID 2/3
			PRT	Product Type		
Must Use	REF02	127	Reference Id	lentification	X	AN 1/30
				ormation as defined for a particular Transa he Reference Identification Qualifier	action Set	or as

 ${\bf Segment:} \qquad {\bf \overline{REF}} \ \ {\bf Reference} \ {\bf Identification} \ {\bf -Supplier} \ {\bf Rate}$

Position: 120

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify identifying information

Data Element Summary

Ref. Data Des. **Element** Name **Attributes Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification RB Rate code number Identifies an Energy Service Provider rate class **Must Use** REF02 127 **Reference Identification**

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

Segment: **REF** Reference Identification - Service Identifier

Position: 120

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional

Max Use: 1

Purpose: To specify identifying information

Must Use REI	F01 128	Name Reference Identification Qualifier Code qualifying the Reference Identification		M	ributes ID 2/3
		MG	Meter Number		
Must Use REI	F02 127	Reference Identification Reference information as defined for a particular Transaction specified by the Reference Identification Qualifier		X on Set	AN 1/30 or as

Segment: Reference Identification - Pricing Structure

Position: 120

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional

Max Use: 1

Purpose: To specify identifying information

Data Element Summary

Ref. Data Des. **Element** Name **Attributes Must Use** REF01 128 **Reference Identification Qualifier** M ID 2/3 Code qualifying the Reference Identification **Price Quote Number** Identifies a unit pricing category under a rate code **Must Use** REF02 127 **Reference Identification**

Reference information as defined for a particular Transaction Set or as

specified by the Reference Identification Qualifier

 ${\bf Segment:} \qquad {\bf \underline{REF}} \ \ {\bf Reference} \ {\bf Identification} \ {\bf -Primary} \ {\bf Metering} \ {\bf Indicator}$

Position: 120

Loop: IT1 Optional (Review NH Business rules format33.xls)

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify identifying information

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	REF01	128		Reference Identification Qualifier Code qualifying the Reference Identification		
			QY	Service Performed Code		
Must Use	REF02	127	Reference Id	lentification	\mathbf{X}	AN 1/30
			Reference information as defined for a particular Transaction Set specified by the Reference Identification Qualifier			

Segment: DTM Date/Time Reference - Current Read

Position: 150

Loop: IT1 Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use: 1

Purpose: To specify pertinent dates and times

Must Use	Ref. <u>Des.</u> DTM01	Data Element 374	Name Date/Time Qualific Code specifying typ	er e of date or time, or both date and time	Attı M	ributes ID 3/3
			151	Service Period End		
Must Use	DTM05	1250	Date Time Period Decode indicating the	Format Qualifier date format, time format, or date and time	X ne form	ID 2/3 mat
			D8	Date Expressed in Format CCYYMN	1DD	
Must Use	DTM06	1251	Date Time Period Expression of a date	e, a time, or range of dates, times or dates	X and t	AN 1/35 times

Segment: DTM Date/Time Reference - Previous Read

Position: 150

Loop: IT1 Optional (Must Use)

Level: Detail

Usage: Optional (Must Use)

Max Use:

Purpose: To specify pertinent dates and times

Data Element Summary

			Data Elem	ent Summary			
	Ref.	Data					
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>	
Must Use	DTM01	374	Date/Time Qualific	e r	\mathbf{M}	ID 3/3	
			Code specifying typ	be of date or time, or both date and time			
			150	Service Period Start			
Must Use	DTM05	1250	Date Time Period	Format Qualifier	\mathbf{X}	ID 2/3	
			Code indicating the date format, time format, or date and time format				
			D8	Date Expressed in Format CCYYMN	1DD		
Must Use	DTM06	1251	Date Time Period		\mathbf{X}	AN 1/35	

Expression of a date, a time, or range of dates, times or dates and times

Segment: SLN Subline Item Detail - Non TOU

Position: 200

Loop: SLN Optional

Level: Detail Usage: Optional

Max Use: 1

Purpose: To specify product subline detail item data

Notes: The IT1/SLN segment is used to overcome the limitation on the number of

IT1/SAC loops.

Each SLN loop will contain only one SAC and TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref.	Data					
	Des.	Element	<u>Name</u>	<u>Attributes</u>			
Must Use	SLN01	350	Assigned Identification	M AN 1/20			
			Alphanumeric characters assigned for differentiation within a transaction set				
			Used as a loop counter				
Must Use	SLN03	662	Relationship Code	M ID 1/1			
			Code indicating the relationship between entities				
			A Add				

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail Usage: Optional

Max Use:

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount

or percentage for the service, promotion, allowance, or charge

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref.	Data				
	Des.	Element	<u>Name</u>		Att	<u>ributes</u>
Must Use	SAC01	248	Allowance or Charge Indicator			ID 1/1
			Code which indicate	Code which indicates an allowance or charge for the service specif		
			\mathbf{C}	Charge		
				The amount in SAC05 should be adsumming the invoice total.	ded '	when
	SAC03	559	Agency Qualifier (Code	\mathbf{X}	ID 2/2
			Code identifying the	Code identifying the agency assigning the code values		
			\mathbf{EU}	Electric Utilities		
				Use this code until the DM for "UT" of approved.	code	is
Must Use	SAC04	1301	Agency Service, Pr Agency maintained charge		AN 1/10 vance, or	
			ENC001	Energy Charges		
Must Use	SAC05	610	Amount Monetary amount		O	N2 1/15
			The SAC01 will in	dicate whether to add or subtract from	n the	TDS.

Segment: SLN Subline Item Detail - Current Peak

Position: 200

Loop: SLN Optional

Level: Detail Usage: Optional

Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data		
	Des.	Element	<u>Name</u>	<u>Attributes</u>
Must Use	SLN01	350	Assigned Identification	M AN 1/20
			Alphanumeric characters assigned for differentiation w	ithin a transaction set
			Used as a loop counter	
Must Use	SLN03	662	Relationship Code	M ID 1/1
			Code indicating the relationship between entities	
			A Add	

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail
Usage: Optional
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

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

Must Use	Ref. <u>Des.</u> SAC01	Data Element 248	Name Allowance or Char Code which indicate	rge Indicator es an allowance or charge for the service	M	ributes ID 1/1 fied
			\mathbf{C}	Charge		
				The amount in SAC05 should be adsumming the invoice total.	ided v	when
	SAC03	559	Agency Qualifier (Code	X	ID 2/2
			Code identifying the	e agency assigning the code values		
			\mathbf{EU}	Electric Utilities		
Must Use	SAC04	1301		comotion, Allowance, or Charge Code code identifying the service, promotion,		
			ENC037	Peak Charge		
Must Use	SAC05	610	Amount Monetary amount		0	N2 1/15

Segment: SLN Subline Item Detail - Current Off-Peak

Position: 200

Loop: SLN Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Attr</u>	<u>ributes</u>
Must Use	SLN01	350	Assigned Identification	\mathbf{M}	AN 1/20
			Alphanumeric characters assigned for differentiation within a	ı trans	saction set
			Used as a loop counter		
Must Use	SLN03	662	Relationship Code Code indicating the relationship between entities	M	ID 1/1
			A Add		

SAC Service, Promotion, Allowance, or Charge Information **Segment:**

Position: 230

> Loop: SLN Optional

Level: Detail **Usage:** Optional Max Use:

Purpose: To request or identify a service, promotion, allowance, or charge; to specify the amount

or percentage for the service, promotion, allowance, or charge

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref. Des.	Data Element	Name	·	A 441	ributes
Must Use	SAC01	248	Allowance or Char	rge Indicator es an allowance or charge for the service	M	ID 1/1
			C	Charge		
				The amount in SAC05 should be ad summing the invoice total.	ded v	when
	SAC03	559	Agency Qualifier (Code	X	ID 2/2
			Code identifying the	e agency assigning the code values		
			EU	Electric Utilities		
Must Use	SAC04	1301	9	romotion, Allowance, or Charge Code code identifying the service, promotion,		
			ENC003	Off Peak Charge		
Must Use	SAC05	610	Amount Monetary amount		O	N2 1/15

Segment: SLN Subline Item Detail - Current Shoulder

Position: 200

Loop: SLN Optional

Level: Detail
Usage: Optional
Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data			
	Des.	Element	<u>Name</u>	<u>Attr</u>	<u>ributes</u>
Must Use	SLN01	350	Assigned Identification	M	AN 1/20
			Alphanumeric characters assigned for differentiation within	a trans	saction set
			Used as a loop counter		
Must Use	SLN03	662	Relationship Code Code indicating the relationship between entities	M	ID 1/1
			A Add		

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail Usage: Optional

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

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		Attr	<u>ributes</u>
Must Use	SAC01	248	Allowance or Chai	rge Indicator	\mathbf{M}	ID 1/1
			Code which indicate	es an allowance or charge for the service	speci	fied
			C	Charge		
				The amount in SAC05 should be ad summing the invoice total.	ded v	when
	SAC03	559	Agency Qualifier (Code	X	ID 2/2
			Code identifying the	e agency assigning the code values		
			\mathbf{EU}	Electric Utilities		
Must Use	SAC04	1301	9	romotion, Allowance, or Charge Code code identifying the service, promotion, Shoulder Charge		
Must Use	SAC05	610	Amount Monetary amount		O	N2 1/15

Segment: SLN Subline Item Detail - Current Demand

Position: 200

Loop: SLN Optional

Level: Detail
Usage: Optional

Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data			
	Des.	Element	Name	Attr	<u>ributes</u>
Must Use	SLN01	350	Assigned Identification	\mathbf{M}	AN 1/20
			Alphanumeric characters assigned for differentiation within	a tran	saction set
			Used as a loop counter		
Must Use	SLN03	662	Relationship Code Code indicating the relationship between entities	M	ID 1/1
			A Add		

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail
Usage: Optional
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

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		<u>Attr</u>	<u>ributes</u>
Must Use	SAC01	248	Allowance or Chai	ge Indicator	\mathbf{M}	ID 1/1
			Code which indicate	es an allowance or charge for the service	speci	fied
			C	Charge		
				The amount in SAC05 should be adsumming the invoice total.	ded v	when
	SAC03	559	Agency Qualifier (Code	X	ID 2/2
			Code identifying the	e agency assigning the code values		
			EU	Electric Utilities		
Must Use	SAC04	1301	9	comotion, Allowance, or Charge Code code identifying the service, promotion,		
			DMD001	Demand Charge		
Must Use	SAC05	610	Amount Monetary amount		O	N2 1/15

Segment: SLN Subline Item Detail - Supplier Arrears

Position: 200

Loop: SLN Optional

Level: Detail Usage: Optional

Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data			
	Des.	Element	<u>Name</u>	Att	<u>ributes</u>
Must Use	SLN01	350	Assigned Identification	\mathbf{M}	AN 1/20
			Alphanumeric characters assigned for differentiation within	a tran	saction set
			Used as a loop counter		
Must Use	SLN03	662	Relationship Code	M	ID 1/1
			Code indicating the relationship between entities		
			A Add		

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail Usage: Optional

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

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		Attr	<u>ributes</u>
Must Use	SAC01	248	Allowance or Chai	rge Indicator	\mathbf{M}	ID 1/1
			Code which indicate	es an allowance or charge for the service	speci	fied
			\mathbf{C}	Charge		
				The amount in SAC05 should be ad summing the invoice total.	ded v	when
	SAC03	559	Agency Qualifier (Code	X	ID 2/2
			Code identifying the	e agency assigning the code values		
			EU	Electric Utilities		
Must Use	SAC04	1301	9	comotion, Allowance, or Charge Code code identifying the service, promotion,		
			PRB001	Past Due Balance		
Must Use	SAC05	610	Amount Monetary amount		O	N2 1/15

Segment: SLN Subline Item Detail - Arrears Interest

Position: 200

Loop: SLN Optional

Level: Detail Usage: Optional

Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data			
	Des.	Element	<u>Name</u>	Att	<u>ributes</u>
Must Use	SLN01	350	Assigned Identification	\mathbf{M}	AN 1/20
			Alphanumeric characters assigned for differentiation with	in a tran	saction set
			Used as a loop counter		
Must Use	SLN03	662	Relationship Code	\mathbf{M}	ID 1/1
			Code indicating the relationship between entities		
			A Add		

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail
Usage: Optional
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

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref.	Data		•		
	Des.	Element	<u>Name</u>		Attı	<u>ributes</u>
Must Use	SAC01	248	Allowance or Chai	rge Indicator	M	ID 1/1
			Code which indicate	es an allowance or charge for the service	speci	fied
			\mathbf{C}	Charge		
				The amount in SAC05 should be ad summing the invoice total.	ded v	when
	SAC03	559	Agency Qualifier (Code	X	ID 2/2
			Code identifying the	e agency assigning the code values		
			\mathbf{EU}	Electric Utilities		
Must Use	SAC04	1301		comotion, Allowance, or Charge Code code identifying the service, promotion,		
			LPC001	Late Payment Charge		
Must Use	SAC05	610	Amount Monetary amount		O	N2 1/15

Segment: SLN Subline Item Detail - Current Customer Charge

Position: 200

Loop: SLN Optional

Level: Detail
Usage: Optional

Max Use: 1

Purpose: To specify product subline detail item data

	Ref.	Data						
	Des.	Element	<u>Name</u>	Att	<u>ributes</u>			
Must Use	SLN01	350	Assigned Identification	\mathbf{M}	AN 1/20			
			Alphanumeric characters assigned for differentiation within a transaction set					
			Used as a loop counter					
Must Use	SLN03	662	Relationship Code	M	ID 1/1			
			Code indicating the relationship between entities					
			A Add					

Segment: SAC Service, Promotion, Allowance, or Charge Information

Position: 230

Loop: SLN Optional

Level: Detail
Usage: Optional
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

Notes: Each SLN loop will contain only one SAC an TXI. Multiple charges/allowances

require multiple SLN loops.

	Ref. Des.	Data <u>Element</u>	<u>Name</u>	·	Att	<u>ributes</u>
Must Use	SAC01	248	Allowance or Char	rge Indicator	M	ID 1/1
			Code which indicates an allowance or charge for the service specified			fied
			C	Charge		
				The amount in SAC05 should be ad summing the invoice total.	ded '	when
	SAC03	559	Agency Qualifier (Code	\mathbf{X}	ID 2/2
			Code identifying the	e agency assigning the code values		
			EU	Electric Utilities		
Must Use	SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code X AN 1/10 Agency maintained code identifying the service, promotion, allowance, or charge			
			BAS001	Basic Customer Administrative Char	ges	
Must Use	SAC05	610	Amount Monetary amount		О	N2 1/15

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

Notes: TDS01 is the total amount due for this invoice and must equal the algebraic sum

of the amounts in the TXI02 and SAC05 segments. If this amount is negative,

send the minus sign.

Data Element Summary

Ref. Data

Monetary amount

Segment: CTT Transaction Totals

Position: 070

Loop:

Level: Summary Usage: Optional

Max Use: 1

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

Data Element Summary

Ref. Data

Des. Element Name

Must Use CTT01 354 Number of Line Items

Attributes

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)

	Ref. Des.	Data Element	Name	Attributes	
March IIaa					
Must Use	SE01	96	Number of Included Segments	M N0 1/10	
			Total number of segments included in a transaction set inclusegments	iding ST and SE	
Must Use	SE02	329	Transaction Set Control Number	M AN 4/9	
112450 050	2202	025	Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set		