



Electronic Data Interchange

Implementation Guide

(Last revised on July 15, 2003)

TRANSACTION SET

810

Version 4010

Outbound Invoice

BUNDLED SERVICE

version 1.1 • July 2, 1999

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77 Beale Street
San Francisco, CA 94177

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Summary of Changes

| | |
|-------------------|---|
| May 28, 1999 | Initial Release 810 v.4010 Full Service |
| July 2, 1999 | Corrections made to sub element codes in MEA07 (pg. 30) to reflect consistency with UIG 810 v.4010. |
| Dec. 1, 1999 | SAC15 Code List added to Guide. |
| Dec. 3, 1999 | Addition to SAC15 – Revenue Cycle Service Credits (RCSC). |
| August 30, 2000 | Addition to NTE Segment, ROU (PG&E's rotating outage block number) Addition to DTM Segment, DTM02 (Date, expression of a date) Addition to TXI Segment, ET (Energy Tax), TX108 (CPUC Energy Tax) Addition to MEA Segment, Add to MEA07, 41 off peak, 42 on peak, 43 mid peak and 51 total |
| March 2, 2001 | Addition to SAC15 Code List on pages 41 and 42 GEN000 (Generation), GEN001 (PGE Generation), SUR001 (Electric Emergency Procurement Surcharge), TPI002 (Third Party Initiated from Energy Service Provider) |
| Oct. 15, 2001 | Addition to Page 23, Added to N101, SJ; Energy Service Provider (ESP), Addition to Page 41 SAC15 Code List , Added DSC000 for SAC04, and SAC15 text Discount on energy used. |
| November 12, 2002 | Update to Pages 9-10 – A1 Small Commercial-Duel Commodity – Change in Sample, Update to Pages 11-12 – E19 Commercial – TOU With Demand, Change in Sample – replaced with EDI 810 Invoice – Gas Sample. Addition to Page 22, REF01 added CR, LI and RU. Addition to Pages 41 – 43, added additional SAC15 Codes. All of the additional codes are in bold print. |
| January 10, 2003 | Addition to MEA07, added verbiage referring to SAC 15 Codes. Also, code changes to SAC Code List on pages 38 and 39. |
| January 22, 2003 | Code changes to SAC Code List on pages 38 and 39. |
| February 3, 2003 | Made change to page 7, changed VAN to INOVIS. Also, made change to page 28; added codes IT102, IT103, IT104 and added Syntax note #1. Added note sample on page 35, SLN notes. Added TDS note sample on page 40. |
| March 11, 2003 | Updated SAC Codes on pages 39 and 40. Deleted the following codes, MSC022 – Competition Transition Charge, ENC001 – Electric Energy Charge, SUR000 – Energy Surcharges. Added the following codes, ENC001 – Generation, MSC026 – DWR Bond Charges |

July 15, 2003

Page 8, change in contact person; add Barakah Bibb-Smith also change Data Segment Terminator ^.

Pages 10 - 14 removed Sample EDI 810 Gas and ESP Invoices and replaced with revised EDI 810 ESP Invoice sample.

Removed NTE Segment; data previously represented in NTE01 is now located in the REF Segment in the ID- SLN loop.

Page 24, REF Segment, changed REF01 12, to read Energy Service Provider, added REF01 5B definition and ZZ definition.

Page 25, N1 Segment, added N101 MQ – Service Address

Removed BAL Segment, data previously represented in BAL Segment is now moved to SAC Segment in Summary Section.

Page 33, TXI Segment is not currently used by PG&E, data moved to the IT1 loop and summary section.

Page 34, PAM Segment will be moved to follow the IT1 Segment.

Page 37, REF Segment, added REF 01 codes, 45, 5B, CR, LI, RU, ZZ

Page 39, DTM Segment, DTM01 code 514, added notes.

Page 40, SLN Segment, added SLN 09 SV, SLN 10 PG&E date range.

Page 41, Added REF Segment.

Page 43, updated SAC15 Code List to include ADJ0BC (Bill Correction)

Page 47 - 50, added N1, N2, N3, N4 Segments in this section.

Pages 52 and 53, added SAC Segment in this section.

810 Invoice Best Practices

Global Best Practices

Use of Text Segments

- ?? The UIG recommends that the note (NTE) segment be avoided because this segment is not machine-readable. Other text segments, such as MSG and PID may be used if their use will lead to machine process able information in subsequent applications.

Use of ZZ Qualifier

- ?? The use of data fields to transmit un-coded or textual information should be avoided. This practice is usually associated with the use of the ZZ qualifier as a normal course of doing business.

997 – Functional Acknowledgment

- ?? The purpose of the 997 is to verify receipt of a transmitted document only, not the acceptance of the document.

Interchange Control Number

- ?? A unique and sequential interchange control number should be used on every envelope that is transmitted to a trading partner. This approach will allow the receiver to audit the interchange for any duplicate or missing transmissions.

Use of Dun & Bradstreet (D-U-N-S) Number

- ?? Dun & Bradstreet assigns a nine-digit identification number to every business entity. This number, known as the DUNS number, should be used to identify the trading partners. A trading partner may append a four-digit suffix to the DUNS number to uniquely identify a specific location within the entity; this number is referred to as a DUNS + 4 number.

Banking Transactions

- ?? Guidelines that outline the use of transactions relating to interactions between a sender and the sender's financial institution are available from the Bankers EDI Council and the NACHA EDI Council. Other publications that address the use of financial payment transactions include Technical Report 1 (TR1) and Technical Report 2 (TR2); both of these publications are available from DISA.

Capitalization

- ?? The use of all upper case (capital) letters is mandatory.

Document-Specific Best Practices

Use of the NTE Segment

?? Although the UIG recommends that the NTE segment be avoided, there are occasions when the utility is required by law or regulation to include messages or notices in all invoices. Under these circumstances, the NTE segment should be used.

Use of the IT1 Segment

?? An IT1 loop is used to accumulate all consumption detail for a single account or meter(s). Each meter will be detailed in a separate IT1 loop.

Use of the MEA Segment

?? The MEA segment is used to convey consumption readings for one metering period. It also conveys usage, demand multipliers and KVAR readings.

Use of the Detail IT1/REF Segment, Position 120

?? This segment is used only when the IT1 loop is used to present account information. Trading partners using the meter model (where an IT1 conveys meter charges and usage) should provide the account reference information in the Header REF, position 050.

Use of the SLN Segment

?? The IT1/SLN segment is used to overcome the limitation on the number of IT1/SAC loops. In some environments, more than 25 separate charges or allowances are associated with one IT1. Use of the SLN segment provides for a maximum of 1,000 individual SAC and TXI iterations. If and when the 810 is revised to permit more than 25 IT1/SAC loops, this 810 Guideline will be revised to remove the SLN segment.

Values in Elements SAC01 and SAC05

?? Previous editions of this guideline stated that the amount shown in SAC05 will always be positive and that the code used in SAC01 will indicate whether to add or subtract the SAC05 amount to or from the TDS. As a result of a clarification provided by X12F, it has been determined that the above statement is incorrect; future versions of the UIG guidelines will no longer contain the above statement. The code used in 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.

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?? Test Examples – Full Service

?? 810 Invoice Transaction Set – Full Service

| |
|--|
| PACIFIC GAS AND ELECTRIC SET-UP AND CONTACT INFORMATION |
|--|

Pacific Gas and Electric Communication ID:

(ISA Sender ID)

00691287702

Communications ID Qualifier:

(ISA Sender ID Qualifier)

09

Data Element Delimiter

|

(Hex Value 6A)

Data Segment Terminator

^

(Hex Value 5F)

Data Sub-Element Separator

~

(Hex Value A1)

Pacific Gas and Electric's Value Added Network: Invis*EDI Services

(800) 825-4282

PG&E's Transmit and Receive time: Tuesday through Saturday at 6 a.m. - 8 a.m.

Pacific Gas and Electric's Contact:

Tom Elder

415-973-5119 (Office)

TXE6@PGE.COM (E-mail)

Barakah Bibb-Smith

415-973-3047 (Office)

BMB3@PGE.COM (E-mail)

| |
|--|
| PG&E utilizes ANSI X12 version 004010 following the Utility Industry Guideline (UIG) for 004010. In some instances, code values from later versions of the standards have been incorporated. This document is subject to change based upon future UIG approved standards and regulatory mandates. |
|--|

EDI Trading Partner Setup Form

| | |
|------------------------------|-------------------------|
| Trade Partner Name: _____ | |
| PG&E Customer Name: _____ | |
| EDI Business Contact: _____ | Phone: _____ |
| FAX: _____ | Internet Address: _____ |
| EDI Technical Contact: _____ | |
| Phone: _____ | |
| FAX: _____ | Internet Address: _____ |

| | |
|-----------------------------------|--------------------|
| Sender/Receiver ID: _____ | ID Qualifier _____ |
| Mailing Address: _____ _____ | |
| Value Added Network: _____ | |
| Industry Standard/Version: _____ | |
| Supported Transaction Sets: _____ | |

| | |
|--|--|
| Value Added Service Bank: _____ | |
| Bank Transit Routing Number: _____ | |
| Bank Account Number: _____ | |
| NACHA Format: CTX/820 Y or N _____ Other _____ | |

| |
|---|
| Mailing address you would like PG&E to use for all Regulatory mandated material: _____ _____ _____ |
|---|

Sample – EDI 810 Invoice – W/Demand Usage

ST|810|0001^
BIG|20030604|0000123456030604||||PR|00^
REF|12|0000123456^
REF|LI|67505107^
N1|8R|PGE CUSTOMER^
N3|% 67500651|P O BOX 1234^
N4|SAN FRANCISCO|CA|94105^
N1|8S|PACIFIC GAS & ELECTRIC|9|00691287702^
ITD|||||20030623^
DTM|186|20030503||D8|20030503^
DTM|187|20030604||D8|20030604^
IT1|001001|15887|KH|0|SV|ELECTRIC|C3|METER|MB|TOU^
PAM|99|32|DA||PM|194|20020604^
PAM|99|13685|KH||PM|194|20020604^
MEA||MU|1^
MEA|AA||KH|13385|29272^
REF|MG|882R20^
REF|NH|E19S^
REF|5B|0688560005^
REF|RU|C^
REF|45|CHM4814221^
DTM|150|20030502||D8|20030502^
DTM|151|20030604||D8|20030604^
SLN|CHG001001001||A||||SV|05/03/2003 - 06/04/2003^
REF|ZZ|AG|ROU|ROTATING OUTAGE BLOCK 50^
SAC|N||EU|ENC001|117418||0|KH|0||||Electric Charges^
SAC|N||EU|SUR000|15887||.01|KH|15887||||Energy Surcharge-S (ES)^
SAC|N||EU|CRE014|-79303||-.049916|KH|15887||||Direct Access Credit^
SAC|N||EU|SUR000|505||0|KH|0||||Franchise Fee Surcharge^
SAC|N||EU|ENC000|54507||0|KH|0||||Net Charges^
SLN|UNB001001002||A||||SV|05/03/2003 - 06/04/2003^
SAC|N||EU|ENC001|19608||0|KH|0||||Generation^
SAC|N||EU|GTC001|3196||0|KH|0||||Transmission^
SAC|N||EU|DIS001|25066||0|KH|0||||Distribution^
SAC|N||EU|MSC024|5560||0|KH|0||||Public Purpose Programs^
SAC|N||EU|MSC025|572||0|KH|0||||Nuclear Decommissioning^
SAC|N||EU|SUR000|505||0|KH|0||||Franchise Fee Surcharge^
SLN|TOU001001003||A||||SV|05/03/2003 - 06/04/2003^
SAC|N||EU|ENC005|00||.08773|KH|2918||||Summer Peak Usage^
SAC|N||EU|ENC006|00||.0581|KH|3383||||Summer Partial-Peak Usage^
SAC|N||EU|ENC004|00||.05059|KH|9586||||Summer Off-Peak Usage^
SLN|TOU001001004||A||||SV|05/03/2003 - 06/04/2003^
SAC|N||GU|DMD012|00||0|K1|0||||Summer Peak Demand^
SAC|N||GU|DMD013|00||3.7|K1|23||||Summer Partial-Peak Demand^
SAC|N||GU|DMD011|00||2.55|K1|25||||Summer Off-Peak Demand^
SLN|TOT001001005||A||||SV|05/03/2003 - 06/04/2003^
SAC|C||EU|ENC000|54507||0|KH|0||||TOTAL CHARGES^
N1|MQ|PGE SERVICE ADDRESS^
N3|1970 FOLSOM^

N4|SAN FRANCISCO|CA|94123^
TDS|54507^
SAC|N||GU|ENC001|54507|||||||Total Electric Charges^
SAC|C||GU|PRB000|71579|||||||Previous Balance^
SAC|A||GU|PAY000|-71579|||||||Payment - Thank You 05/09/2003^
CTT|1^
SE|56|0001^

SAMPLE – EDI 810 ESP INVOICE

ISA|00| |00| |09|00691287702 |14|005555121 |030702|133
9|U|00401|000000242|0|P|~^
GS|IN|00691287702|005555121|20030702|13390749|238|X|004010^
ST|810|0001^
BIG|20030508|4153025078030508||||PR|00^
REF|12|1111199999^
N1|SJ|ANY ESP^
N3|101 GARTH ST^
N4|ANYHOW|CA|94600-4202^
N1|8S|PACIFIC GAS & ELECTRIC|9|00691287702^
ITD||||20030508^
IT1|001001|0|TD|0||SV|GAS|C3|METER^
REF|5B|1111199005^
SLN|ADJ001001001||A||||SV|05/28/2003 - 05/28/2003^
REF|12|8699675804^
REF|5B|8699675025^
REF|CR|8699675025^
SAC|C||GU|ADJ0TA|7617||0|TD|0||||Charges transferred to Service Provider^
SLN|ADJ001001002||A||||SV|05/28/2003 - 05/28/2003^
REF|12|6676847671^
REF|5B|6676847005^
REF|CR|6676847005^
SAC|A||GU|ADJ0TA|-220||0|TD|0||||Charges transferred to Service Provider^
SLN|ADJ001001003||A||||SV|05/28/2003 - 05/28/2003^
REF|12|6993497070^
REF|5B|6993497005^
REF|CR|6993497005^
SAC|C||GU|ADJ0TA|-2878||0|TD|0||||Charges transferred to Service Provider^
SLN|ADJ001001004||A||||SV|05/28/2003 - 05/28/2003^
REF|12|8699675804^
REF|5B|8699675090^
REF|CR|8699675090^
SAC|C||GU|ADJ0TA|56608||0|TD|0||||Charges transferred to Service Provider^
TDS|82637899^
SAC|C||GU|PRB000|105894744|||||||Previous Balance^
SAC|A||GU|PAY000|-23322233|||||||Total Payments - Thank You^
SAC|N||GU|ADJ000|611.27|||||||Total Adjustments^
CTT|1^
SE|36|0001^
ST|810|0002^
BIG|20030430|6676847671030430||||PR|00^
REF|12|6676847671^

N1|8R|FRED JONES^
 N3|PO BOX 5006^
 N4|ANYWHERE|CA|94500-5006^
 N1|8S|PACIFIC GAS & ELECTRIC|9|00691287702^
 ITD|20030430^
 DTM|186|20030401||D8|20030401^
 DTM|187|20030430||D8|20030430^
 IT1|001001|9|TD|0|SV|GAS|C3|METER^
 PAM|99|30|DA||PM|194|20020501^
 PAM|99|9|TD||PM|194|20020501^
 MEA||MU|1.0155^
 MEA|AE||TD|5664|5673^
 REF|MG|25846733^
 REF|NH|G1^
 REF|5B|6676847005^
 REF|CR|6676847005^
 REF|45|ZJJ9505806^
 DTM|150|20030401||D8|20030401^
 DTM|151|20030430||D8|20030430^
 SLN|CHG001001001||A||||SV|04/01/2003 - 04/06/2003^
 REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.67267 / therm^
 REF|ZZ|OTH|04/01/2003^
 SAC|N||GU|ENC001|177||0|TD|0||||Gas Charges^
 SAC|N||GU|BAS000|00||0|TD|13.2||||Baseline Quantity^
 SAC|N||GU|ENC037|00||.98399|TD|1.8||||Baseline Usage^
 SAC|N||GU|CRE000|-121||0|TD|0||||Procurement Credit^
 SAC|N||GU|ENC000|56||0|TD|0||||Net Charges^
 SLN|CHG001001002||A||||SV|04/07/2003 - 04/30/2003^
 REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.48172 / therm^
 REF|ZZ|OTH|04/07/2003^
 REF|ZZ|ZZZ|Public Purpose Program Surcharge \$0.02 (\$0.0254 per therm)^
 SAC|N||GU|ENC001|571||0|TD|0||||Gas Charges^
 SAC|N||GU|BAS000|00||0|TD|52.8||||Baseline Quantity^
 SAC|N||GU|ENC037|00||.79304|TD|7.2||||Baseline Usage^
 SAC|N||GU|CRE000|-347||0|TD|0||||Procurement Credit^
 SAC|N||GU|ENC000|224||0|TD|0||||Net Charges^
 SLN|TOT001001003||A||||SV|03/31/2003 - 04/30/2003^
 SAC|C||GU|ENC000|280||0|TD|0||||TOTAL CHARGES^
 SLN|ADJ001001004||A||||SV|05/28/2003 - 05/28/2003^
 SAC|C||GU|ADJ000|2000||0|TD|0||||Gas Reconnection Fee^
 SAC|A||GU|ADJ000|-2500||0|TD|0||||Missed Appointments Credits^
 SAC|C||GU|ADJ0TA|220||0|TD|0||||Charges transferred to Service Provider^
 N1|MQ|FRED JONES^
 N3|34600 APPLE BLVD^
 N4|ANYWHERE|CA|94500^
 TDS|00^
 SAC|N||GU|ENC001|280|||||||Total Gas Charges^
 SAC|N||GU|ADJ000|-280|||||||Total Adjustments^
 CTT|1^
 SE|53|0002^
 ST|810|0003^
 BIG|20030412|6993497070030412||||PR|00^
 REF|12|6993497070^

N1|8R|RALPH SMITH^
 N3|PO BOX 1678^
 N4|ANYWHERE|CA|95400-1678^
 N1|8S|PACIFIC GAS & ELECTRIC|9|00691287702^
 ITD|||||20030412^
 DTM|186|20030313||D8|20030313^
 DTM|187|20030412||D8|20030412^
 IT1|001001|10|TD|0|SV|GAS|C3|METER^
 PAM|99|28|DA||PM|194|20020410^
 PAM|99|9|TD||PM|194|20020410^
 MEA||MU|1.07587^
 MEA|AE||TD|197|206^
 REF|MG|48962540^
 REF|NH|GNR1^
 REF|5B|6993497005^
 REF|CR|6993497005^
 REF|45|JNR9170001^
 DTM|150|20030313||D8|20030313^
 DTM|151|20030412||D8|20030412^
 SLN|CHG001001001||A||||SV|03/13/2003 - 04/06/2003^
 REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.67031 / therm^
 REF|ZZ|OTH|03/13/2003^
 SAC|N||GU|ENC001|1658||0|TD|0||||Gas Charges^
 SAC|N||GU|CRE000|-541||0|TD|0||||Procurement Credit^
 SAC|N||GU|SUR000|08||0|TD|0||||Franchise Fee Surcharge^
 SAC|N||GU|ENC000|1125||0|TD|0||||Net Charges^
 SLN|CHG001001002||A||||SV|04/07/2003 - 04/12/2003^
 REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.47936 / therm^
 REF|ZZ|OTH|04/07/2003^
 SAC|N||GU|ENC001|350||0|TD|0||||Gas Charges^
 SAC|N||GU|CRE000|-93||0|TD|0||||Procurement Credit^
 SAC|N||GU|SUR000|01||0|TD|0||||Franchise Fee Surcharge^
 SAC|N||GU|ENC000|258||0|TD|0||||Net Charges^
 SLN|TOT001001003||A||||SV|03/12/2003 - 04/12/2003^
 SAC|C||GU|ENC000|1383||0|TD|0||||TOTAL CHARGES^
 SLN|ADJ001001004||A||||SV|05/28/2003 - 05/28/2003^
 SAC|C||GU|ADJ0TA|-2878||0|TD|0||||Charges transferred to Service Provider^
 SLN|COR001001002||A||||SV|01/27/2003 - 02/27/2003^
 SAC|A||GU|ADJ0BC|-15000||0|TD|4006||||Cancellation^
 SAC|c||GU|ADJ000|11730||0|TD|6011||||Re-billed^
 SLN|COR001001002||A||||SV|02/28/2003 - 03/13/2003^
 SAC|A||GU|ADJ0BC|-13690||0|TD|3332||||Cancellation^
 SAC|c||GU|ADJ000|12699||0|TD|3332||||Re-billed^
 N1|MQ|RALPH SMITH^
 N3|3975 NAPA VALLEY RD^
 N4|ANYWHERE|CA|95400^
 TDS|00^
 SAC|N||GU|ENC001|1383||||||Total Gas Charges^
 SAC|N||GU|ADJ000|-2878||||||Total Adjustments^
 SAC|N||GU|ADJ0BC|-4261||||||Total Bill Corrections^
 CTT|1^
 SE|54|0003^
 ST|810|0004^

BIG|20030503|8699675804030503||||PR|00^
REF|12|8699675804^
N1|8R|JOAN & JOSEPH SAMPLE^
N3|PO BOX 520^
N4|ANYWHERE|CA|94500-0520^
N1|8S|PACIFIC GAS & ELECTRIC|9|00691287702^
ITD||||20030503^
DTM|186|20030313||D8|20030313^
DTM|187|20030410||D8|20030410^
IT1|001001|203|TD|0|SV|GAS|C3|METER^
PAM|99|29|DA||PM|194|20020411^
PAM|99|202|TD||PM|194|20020411^
MEA||MU|1.021^
MEA|AE||TD|3942|4141^
REF|MG|52519137^
REF|NH|GNR1^
REF|5B|8699675025^
REF|CR|8699675025^
REF|45|KJN5020301^
DTM|150|20030313||D8|20030313^
DTM|151|20030410||D8|20030410^
SLN|CHG001001001||A||||SV|03/13/2003 - 04/06/2003^
REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.67031 / therm^
REF|ZZ|OTH|03/13/2003^
SAC|N||GU|ENC001|18250||0|TD|0||||Gas Charges^
SAC|N||GU|CRE000|-11730||0|TD|0||||Procurement Credit^
SAC|N||GU|SUR000|169||0|TD|0||||Franchise Fee Surcharge^
SAC|N||GU|ENC000|6689||0|TD|0||||Net Charges^
SLN|CHG001001002||A||||SV|04/07/2003 - 04/10/2003^
REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.47936 / therm^
REF|ZZ|OTH|04/07/2003^
SAC|N||GU|ENC001|2250||0|TD|0||||Gas Charges^
SAC|N||GU|CRE000|-1342||0|TD|0||||Procurement Credit^
SAC|N||GU|SUR000|20||0|TD|0||||Franchise Fee Surcharge^
SAC|N||GU|ENC000|928||0|TD|0||||Net Charges^
SLN|TOT001001003||A||||SV|03/12/2003 - 04/10/2003^
SAC|C||GU|ENC000|7617||0|TD|0||||TOTAL CHARGES^
SLN|ADJ001001004||A||||SV|05/28/2003 - 05/28/2003^
SAC|C||GU|ADJ0TA|-7617||0|TD|0||||Charges transferred to Service Provider^
N1|MQ|JOSEPH SAMPLE^
N3|3333 AUGUST RD^
N4|ANYWHERE|CA|94500^
IT1|002002|1811|TD|0|SV|GAS|C3|METER^
PAM|99|31|DA||PM|194|20020415^
PAM|99|1803|TD||PM|194|20020415^
MEA||MU|1.0202^
MEA|AE||TD|19980|21755^
REF|MG|3789763X^
REF|NH|GNR1^
REF|5B|8699675090^
REF|CR|8699675090^
REF|45|MJN4687801^
DTM|150|20030315||D8|20030315^

DTM|151|20030414||D8|20030414^
SLN|CHG002002001||A||||SV|03/15/2003 - 04/06/2003^
REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.67031 / therm^
REF|ZZ|OTH|03/15/2003^
SAC|N||GU|ENC001|132472||0|TD|0||||Gas Charges^
SAC|N||GU|CRE000|-90065||0|TD|0||||Procurement Credit^
SAC|N||GU|SUR000|1297||0|TD|0||||Franchise Fee Surcharge^
SAC|N||GU|ENC000|43704||0|TD|0||||Net Charges^
SLN|CHG002002002||A||||SV|04/07/2003 - 04/14/2003^
REF|ZZ|OTH|PG&E's Gas Procurement Cost (Rate Schedule G-CP) is \$0.47936 / therm^
REF|ZZ|OTH|04/07/2003^
SAC|N||GU|ENC001|34973||0|TD|0||||Gas Charges^
SAC|N||GU|CRE000|-22403||0|TD|0||||Procurement Credit^
SAC|N||GU|SUR000|334||0|TD|0||||Franchise Fee Surcharge^
SAC|N||GU|ENC000|12904||0|TD|0||||Net Charges^
SLN|TOT002002003||A||||SV|03/14/2003 - 04/14/2003^
SAC|C||GU|ENC000|56608||0|TD|0||||TOTAL CHARGES^
SLN|ADJ002002004||A||||SV|05/28/2003 - 05/28/2003^
SAC|C||GU|ADJ0TA|-56608||0|TD|0||||Charges transferred to Service Provider^
N1|MQ|JOAN SAMPLE^
N3|3333 AUGUST RD^
N4|ANYWHERE|CA|94500^
TDS|00^
SAC|N||GU|ENC001|64225|||||||Total Gas Charges^
SAC|N||GU|ADJ000|-64225|||||||Total adjustments^
CTT|2^
SE|79|0004^
GE|5|238^

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.

Interchange Control Header:

| Page No. | Pos. No. | Seg. ID | Name | Req. Des. | Max.Use | Loop Repeat | Notes and Comments |
|----------|----------|---------|----------------------------|-----------|---------|-------------|--------------------|
| 18 | 010 | ISA | Interchange Control Header | M | 1 | | |
| 20 | 020 | GS | Functional Group Header | M | 1 | | |

Heading:

| Page No. | Pos. No. | Seg. ID | Name | Req. Des. | Max.Use | Loop Repeat | Notes and Comments |
|--------------|----------|---------|--------------------------------------|-----------|---------|-------------|--------------------|
| 22 | 010 | ST | Transaction Set Header | M | 1 | | |
| 23 | 020 | BIG | Beginning Segment for Invoice | M | 1 | | |
| 24 | 050 | REF | Reference Identification | O | 12 | | |
| LOOP ID - N1 | | | | | | 200 | |
| 25 | 070 | N1 | Name | O | 1 | | |
| 26 | 080 | N2 | Additional Name Information | O | 2 | | |
| 27 | 090 | N3 | Address Information | O | 2 | | |
| 28 | 100 | N4 | Geographic Location | O | 1 | | |
| 29 | 130 | ITD | Terms of Sale/Deferred Terms of Sale | O | >1 | | |
| 30 | 140 | DTM | Date/Time Reference | O | 10 | | |

Detail:

| Page No. | Pos. No. | Seg. ID | Name | Req. Des. | Max.Use | Loop Repeat | Notes and Comments |
|---------------|----------|---------|------------------------------|-----------|---------|-------------|--------------------|
| LOOP ID - IT1 | | | | | | 200000 | |
| 31 | 010 | IT1 | Baseline Item Data (Invoice) | O | 1 | | |
| 33 | 040 | TXI | Tax Information | O | 10 | | |
| 34 | 055 | PAM | Period Amount | O | >1 | | |
| 35 | 059 | MEA | Measurements | O | 40 | | |
| 37 | 120 | REF | Reference Identification | O | >1 | | |
| 39 | 150 | DTM | Date/Time Reference | O | 10 | | |
| LOOP ID - SLN | | | | | | 1000 | |
| 40 | 200 | SLN | Subline Item Detail | O | 1 | | |
| 41 | 210 | REF | Reference Identification | O | >1 | | |

| | | | | | | |
|----|-----|-----|--|---|----|--|
| 43 | 230 | SAC | Service, Promotion, Allowance, or Charge Information | O | 25 | |
| 47 | 240 | N1 | Name | O | 1 | |
| 48 | 250 | N2 | Additional Name Information | O | 2 | |
| 49 | 260 | N3 | Address Information | O | 2 | |
| 50 | 270 | N4 | Geographic Location | O | 1 | |

Summary:

| <u>Page No.</u> | <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> |
|-----------------|-----------------|----------------|--|------------------|----------------|--------------------|---------------------------|
| 51 | 010 | TDS | Total Monetary Value Summary | M | 1 | | |
| 52 | 040 | SAC | Service, Promotion, Allowance, or Charge Information | O | 25 | | |
| 54 | 070 | CTT | Transaction Totals | O | 1 | | nl |
| 55 | 080 | SE | Transaction Set Trailer | M | 1 | | |

Interchange Control Trailer:

| <u>Page No.</u> | <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> |
|-----------------|-----------------|----------------|-----------------------------|------------------|----------------|--------------------|---------------------------|
| 56 | 030 | GE | Functional Group Trailer | M | 1 | | |
| 57 | 040 | IEA | Interchange Control 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: **ISA** Interchange Control Header
Position: 010
Loop:
Level:
Usage: Mandatory
Max Use: 1
Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

Syntax Notes:

Semantic Notes:

Comments:

Notes:

Ex:

ISA|00||00||01|043000261|ZZ|00691287702B|991015|0823|U|00401|000000333|0|P~^a

Data Element Summary

| | Ref. | Data | | |
|---|-------------|----------------|---|-------------------|
| | <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| M | ISA01 | I01 | Authorization Information Qualifier | M ID 2/2 |
| | | | Code to identify the type of information in the Authorization Information | |
| | | | 00 No Authorization Information Present (No Meaningful Information in I02) | |
| M | ISA02 | I02 | Authorization Information | M AN 10/10 |
| | | | Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01) | |
| M | ISA03 | I03 | Security Information Qualifier | M ID 2/2 |
| | | | Code to identify the type of information in the Security Information | |
| | | | 00 No Security Information Present (No Meaningful Information in I04) | |
| M | ISA04 | I04 | Security Information | M AN 10/10 |
| | | | This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03) | |
| M | ISA05 | I05 | Interchange ID Qualifier | M ID 2/2 |
| | | | Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified | |
| | | | 01 Duns (Dun & Bradstreet) | |
| M | ISA06 | I06 | Interchange Sender ID | M AN 15/15 |
| | | | Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element | |
| M | ISA07 | I05 | Interchange ID Qualifier | M ID 2/2 |
| | | | Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified | |
| | | | ZZ Mutually Defined | |
| M | ISA08 | I07 | Interchange Receiver ID | M AN 15/15 |
| | | | Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them | |

| | | | | | |
|----------|--------------|------------|---|----------|---------------|
| M | ISA09 | I08 | Interchange Date Date of the interchange | M | DT 6/6 |
| M | ISA10 | I09 | Interchange Time Time of the interchange | M | TM 4/4 |
| M | ISA11 | I10 | Interchange Control Standards Identifier Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer Refer to 004010 Data Element Dictionary for acceptable code values. | M | ID 1/1 |
| M | ISA12 | I11 | Interchange Control Version Number This version number covers the interchange control segments 00303 Draft Standard for Trial Use Approved for Publication by ASC X12 Procedures Review Board Through October 1992 00401 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997 | M | ID 5/5 |
| M | ISA13 | I12 | Interchange Control Number A control number assigned by the interchange sender | M | N0 9/9 |
| M | ISA14 | I13 | Acknowledgment Requested Code sent by the sender to request an interchange acknowledgment (TA1) 0 No Acknowledgment Requested | M | ID 1/1 |
| M | ISA15 | I14 | Usage Indicator Code to indicate whether data enclosed by this interchange envelope is test, production or information Refer to 004010 Data Element Dictionary for acceptable code values. | M | ID 1/1 |
| M | ISA16 | I15 | Component Element Separator Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator | M | AN 1/1 |

| | | |
|------------------------|---|--------------------------------|
| Segment: | GS | Functional Group Header |
| Position: | 020 | |
| Loop: | | |
| Level: | | |
| Usage: | Mandatory | |
| Max Use: | 1 | |
| Purpose: | To indicate the beginning of a functional group and to provide control information | |
| Syntax Notes: | | |
| Semantic Notes: | 1 GS04 is the group date. 2 GS05 is the group time. 3 The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02. | |
| Comments: | 1 A functional group of related transaction sets, within the scope of X12 standards, consists of a collection of similar transaction sets enclosed by a functional group header and a functional group trailer. | |
| Notes: | Ex: GS RA 045000234 00491282205B 990715 130510 43 X 004010 ^a | |

Data Element Summary

| | <u>Ref.</u> <u>Des.</u> | <u>Data</u> <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
|---|----------------------------|-------------------------------|---|-------------------|
| M | GS01 | 479 | Functional Identifier Code Code identifying a group of application related transaction sets FA Functional Acknowledgement (997) GE General Request, Response or Confirmation (814) IN Invoice Information (810,819) MO Maintenance Service Order (650) PT Product Transfer and Resale Report (867) RA Payment Order/Remittance Advice (820) | M ID 2/2 |
| M | GS02 | 142 | Application Sender's Code Code identifying party sending transmission; codes agreed to by trading partners | M AN 2/15 |
| M | GS03 | 124 | Application Receiver's Code Code identifying party receiving transmission; codes agreed to by trading partners | M AN 2/15 |
| M | GS04 | 373 | Date Date expressed as CCYYMMDD | M DT 8/8 |
| M | GS05 | 337 | Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99) | M TM 4/8 |
| M | GS06 | 28 | Group Control Number Assigned number originated and maintained by the sender | M N0 1/9 |
| M | GS07 | 455 | Responsible Agency Code Code used in conjunction with Data Element 480 to identify the issuer of the standard X Accredited Standards Committee X12 | M ID 1/2 |
| M | GS08 | 480 | Version / Release / Industry Identifier Code | M AN 1/12 |

Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version

number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

| | |
|--------|---|
| 003030 | Draft Standards Approved for Publication by ASC X12 Procedures Review Board Through October 1992 |
| 004010 | Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1997 |

| | |
|------------------------|--|
| 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: | Ex: ST*810*000000097^ |

| Data Element Summary | | | |
|----------------------|----------------|-------------|---|
| Ref. | Data | | |
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| >> | ST01 | 143 | Transaction Set Identifier Code |
| | | | Code uniquely identifying a Transaction Set |
| | | 810 | Invoice |
| >> | 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 |

| | |
|------------------------|--|
| 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. |
| Comments: | 1 BIG07 is used only to further define the type of invoice when needed. |
| Notes: | Ex: BIG*19990420*ALL3049161990420*****PR*00^ |

| Data Element Summary | | | | |
|----------------------|----------------|---|-------------------|----------------|
| Ref. | Data | | | |
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> | |
| >> BIG01 | 373 | Date Date expressed as CCYYMMDD This will contain the Statement Date. | M | DT 8/8 |
| >> BIG02 | 76 | Invoice Number Identifying number assigned by issuer The Utility will send a unique number. | M | AN 1/22 |
| BIG07 | 640 | Transaction Type Code Code specifying the type of transaction FB Final Bill PR Product (or Service) | O | ID 2/2 |
| BIG08 | 353 | Transaction Set Purpose Code Code identifying purpose of transaction set 00 Original | 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: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes: Ex: REF*12*ALL3049161^

Data Element Summary

| Ref. | Data | Name | Attributes |
|----------|---------|---|------------------|
| Des. | Element | | |
| >> REF01 | 128 | Reference Identification Qualifier | M ID 2/3 |
| | | Code qualifying the Reference Identification | |
| | | 06 System Number | |
| | | A unique number assigned by the manufacturer to identify the initial computer system sold to the customer | |
| | | (Not presently used by PG&E) | |
| | | 11 Account Number | |
| | | (Not presently used by PG&E) | |
| | | Energy Service Provider-assigned account number for the end use customer. | |
| | | [Customer defined ID. Can be alphanumeric.] | |
| | | 12 Billing Account | |
| | | Account number under which billing is rendered | |
| | | Utility-assigned account number for the Energy Service Provider (Primary Key). | |
| | | 45 Old Account Number | |
| | | Identifies accounts being changed | |
| | | Previous Utility-assigned account number for the end use customer. | |
| | | 5B PG&E – SA-ID | |
| | | Service Agreement Identification | |
| | | CR Customer Reference Number | |
| | | Identifies PG&E assigned reference number for Direct Access accounts. | |
| | | LI Line Item Identifier | |
| | | Identifies customer assigned coding. | |
| | | RU Route Number | |
| | | Identifies the Meter Reading Serial. | |
| | | ZZ User defined. | |
| 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 | |
| | | Customer supplied Account Descriptive (Customer supplied information to PG&E that is desired in the invoice). | |
| REF03 | 352 | Description | X AN 1/80 |

A free-form description to clarify the related data elements and their content

| | |
|------------------------|--|
| Segment: | N1 Name |
| Position: | 070 |
| Loop: | N1 Optional |
| Level: | Heading |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To identify a party by type of organization, name, and code |
| Syntax Notes: | 1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required. |
| Semantic Notes: | |
| Comments: | 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. |
| Notes: | Ex: N1*8R*RANDY JACKSON^ N1*8S*PACIFIC GAS & ELECTRIC*9*00691287702^ |

| Data Element Summary | | | | |
|----------------------|---------|------|---|-----------|
| Ref. | Data | Name | Attributes | |
| Des. | Element | | | |
| >> | N101 | 98 | Entity Identifier Code | M ID 2/3 |
| | | | Code identifying an organizational entity, a physical location, property or an individual | |
| | | 8R | Consumer Service Provider (CSP) Customer | |
| | | | End use Customer. | |
| | | 8S | Consumer Service Provider (CSP) | |
| | | | Utility. | |
| | | MQ | Service Address | |
| | | SJ | Energy Service Provider (ESP) | |
| | N102 | 93 | Name | X AN 1/60 |
| | | | Free-form name | |
| | | | Entity ID Code 8R = Customer Name | |
| | | | Entity ID Code 8S = Utility Name | |
| | N103 | 66 | Identification Code Qualifier | X 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 | |
| | N104 | 67 | Identification Code | X AN 2/80 |
| | | | Code identifying a party or other code | |

Segment: **N2** Additional Name Information
Position: 080
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify additional names or those longer than 35 characters in length
Syntax Notes:
Semantic Notes:
Comments:
Notes: Ex: N2*GENERAL SVCS DEPT^

| Data Element Summary | | | |
|----------------------|----------------|---|-------------------|
| Ref. | Data | | |
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| >> | N201 | 93 Name | M AN 1/60 |
| | | Free-form name To specify names or additional information that is required (i.e. ID numbers, etc.) | |
| | N202 | 93 Name | O AN 1/60 |
| | | Free-form name | |

Segment: **N3** Address Information
Position: 090
Loop: N1 Optional
Level: Heading
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:
Notes: Ex: N3*37 MAIN ST^

Data Element Summary

| Ref. | Data | | |
|-------------|----------------|--|-------------------|
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| >> N301 | 166 | Address Information Address information | M AN 1/55 |
| N302 | 166 | Address Information Address information | O AN 1/55 |

| | |
|------------------------|--|
| Segment: | N4 Geographic Location |
| Position: | 100 |
| Loop: | N1 Optional |
| Level: | Heading |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To specify the geographic place of the named party |
| Syntax Notes: | |
| Semantic Notes: | |
| Comments: | <p>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</p> <p>2 N402 is required only if city name (N401) is in the U.S. or Canada.</p> |
| Notes: | Ex: N4*SAN JOSE*CA*93268^ |

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

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 All PG&E bills are due upon presentation.
Notes: Ex: ITD*****19990520^

Data Element Summary

| <u>Ref.</u> | <u>Data</u> | <u>Name</u> | <u>Attributes</u> |
|-------------|----------------|--|-------------------|
| <u>Des.</u> | <u>Element</u> | | |
| ITD06 | 446 | Terms Net Due Date | O DT 8/8 |
| | | Date when total invoice amount becomes due expressed in format CCYYMMDD | |
| | | Date of transmission (if applicable). | |

| | |
|------------------------|---|
| Segment: | DTM Date/Time Reference |
| Position: | 140 |
| Loop: | |
| Level: | Heading |
| Usage: | Optional |
| Max Use: | 10 |
| Purpose: | To specify pertinent dates and times |
| Syntax Notes: | <ol style="list-style-type: none"> 1 At least one of DTM02 DTM03 or DTM05 is required. 2 If either DTM05 or DTM06 is present, then the other is required. |
| Semantic Notes: | |
| Comments: | 1 These dates represent the Invoice Start and End Period dates. |
| Notes: | Ex: DTM*186****D8*19990419^ DTM*187****D8*19990519^ |

| Data Element Summary | | | | |
|----------------------|---------|---|------------|----------------|
| Ref. | Data | Name | Attributes | |
| Des. | Element | | | |
| >> DTM01 | 374 | Date/Time Qualifier | M | ID 3/3 |
| | | Code specifying type of date or time, or both date and time | | |
| | | 186 Invoice Period Start | | |
| | | When the billing period covered by an invoice begins | | |
| | | 187 Invoice Period End | | |
| | | When the billing period covered by an invoice ends | | |
| DTM02 | 373 | Date | X | DT 8/8 |
| | | Expression of a date, eight characters. | | |
| DTM05 | 1250 | Date Time Period Format Qualifier | X | ID 2/3 |
| | | Code indicating the date format, time format, or date and time format | | |
| | | D8 Date Expressed in Format CCYYMMDD | | |
| DTM06 | 1251 | Date Time Period | X | AN 1/35 |
| | | Expression of a date, a time, or range of dates, times or dates and times | | |

Segment: **IT1** **Baseline Item Data (Invoice)**
Position: 010
Loop: IT1 Optional
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.
- 5 If either IT112 or IT113 is present, then the other is required.

Semantic Notes:

Comments:

- 1 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.
- 2 A Meter IT1 loop can be mapped differently, depending on whether Time-Of-Use (TOU) or straight meter measurement is employed. With 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.

Notes:

Ex:
IT1*00001*****SV*MULTIPLE*C3*ACCOUNT^
IT1*00002*****SV*ELECTRIC*C3*METER*MB*NT^
IT1*00003*****SV*GAS^

Data Element Summary

| Ref. | Data | | |
|-------|---------|--|------------|
| Des. | Element | Name | Attributes |
| IT101 | 350 | Assigned Identification | O AN 1/20 |
| | | Alphanumeric characters assigned for differentiation within a transaction set | |
| | | Line item counter. | |
| IT102 | 358 | Quantity Invoiced | M R 1/10 |
| | | Number of units invoiced (supplier units) | |
| IT103 | 355 | Unit or Basis for Measurement Code | M ID 2/2 |
| | | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken. | |
| | | K1 Kilowatt Demand | |
| | | Represents potential power load measured at predetermined intervals | |
| | | K2 Kilovolt Amperes Reactive Demand | |
| | | Reactive power that must be supplied for specific types of customer's equipment; billable when kilowatt demand usage meets or exceeds a defined parameter. | |
| | | K3 Kilovolt Amperes Reactive Hour | |
| | | Represents actual electricity equivalent to kilowatt | |

| | | | | | |
|-------|-----|---|---|---|---------|
| | | | hours; billable when usage meets or exceeds defined parameters. | | |
| | | KH | Kilowatt Hour | | |
| IT104 | 212 | Unit Price | | M | R 1/14 |
| | | Price per unit of product, service, commodity, etc. | | | |
| IT106 | 235 | Product/Service ID Qualifier | | X | ID 2/2 |
| | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | | |
| | | SV | Service Rendered | | |
| IT107 | 234 | Product/Service ID | | X | AN 1/48 |
| | | Identifying number for a product or service | | | |
| | | Examples: ELECTRIC | | | |
| | | GAS | | | |
| | | MULTIPLE (Dual Commodity - Gas & Electric) | | | |
| IT108 | 235 | Product/Service ID Qualifier | | X | ID 2/2 |
| | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | | |
| | | C3 | Classification | | |
| IT109 | 234 | Product/Service ID | | X | AN 1/48 |
| | | Identifying number for a product or service | | | |
| | | ACCOUNT | Account Model | | |
| | | METER | Meter Model | | |
| | | UNMET | To designate Unmetered Service | | |
| IT110 | 235 | Product/Service ID Qualifier | | X | ID 2/2 |
| | | 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 | | |
| IT111 | 234 | Product/Service ID | | X | AN 1/48 |
| | | Identifying number for a product or service | | | |
| | | Examples: NT - Non-TOU Measurement | | | |
| | | TOU - Time of Use Measurement | | | |
| | | NM | Non-Metered Service | | |
| | | NT | Non-Time of Use Measurement | | |
| | | TOU | Time of Use Measurement | | |
| IT112 | 235 | Product/Service ID Qualifier | | X | ID 2/2 |
| | | Code identifying the type/source of the descriptive number used in Product/Service ID (234) | | | |
| | | When IT111 is 'TOU', IT112 and IT113 will further describe the type of TOU meter used. | | | |
| | | EQ | Equipment Type | | |
| IT113 | 234 | Product/Service ID | | X | AN 1/48 |
| | | Identifying number for a product or service | | | |
| | | NR = No reads will be presented. | | | |

| | |
|------------------------|---|
| Segment: | TXI Tax Information |
| Position: | 040 |
| Loop: | SLN Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 10 |
| Purpose: | To specify tax information |
| Syntax Notes: | 1 At least one of TXI02 TXI03 or TXI06 is required. |
| Semantic Notes: | 1 TXI02 is the monetary amount of the tax. 2 TXI03 is the tax percent expressed as a decimal. |
| Comments: | 1 TXI is shown in Account Detail (not Meter Detail). |
| Notes: | Ex: TXI*CA*1435.69*.75***2*A^ - Not currently used by PG&E. Data will be in the IT1 loop and summary section. |

| Data Element Summary | | | | |
|----------------------|---------|---|------------|--------|
| Ref. | Data | Name | Attributes | |
| Des. | Element | | | |
| >> TXI01 | 963 | Tax Type Code Code specifying the type of tax CA City Tax ET Service Tax imposed by City ET Energy Tax | M | ID 2/2 |
| TXI02 | 782 | Monetary Amount Monetary amount | X | R 1/18 |
| TXI03 | 954 | Percent Percentage expressed as a decimal e.g., 75% should be expressed as .75 | X | R 1/10 |
| TXI06 | 441 | Tax Exempt Code Code identifying exemption status from sales and use tax 1 Yes (Tax Exempt) 2 No (Not Tax Exempt) | X | ID 1/1 |
| TXI07 | 662 | Relationship Code Code indicating the relationship between entities A Add | O | ID 1/1 |
| TXI08 | 828 | CPUC's Energy Commission tax | O | R 1/9 |

Segment: **PAM** Period Amount
Position: 055
Loop:
Level: Detail
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 PAM05 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: 1 This segment is used when history consumption data must accompany the invoice.
Total Days and Total KWH or Therms for the same period last year.

Notes:

Ex:
PAM*99*31*DA***PM*194*19980419^
PAM*99*1917*KH***PM*194*19980419^
PAM*99*75*TD***PM*194*19980419^

Data Element Summary

| Ref. | Data | Name | Attributes |
|-----------|---------|--|------------|
| Des. | Element | | |
| PAM01 | 673 | Quantity Qualifier | X ID 2/2 |
| | | Code specifying the type of quantity | |
| | | 99 Quantity Used | |
| | | Quantity of units used | |
| PAM02 | 380 | Quantity | X R 1/15 |
| | | Numeric value of quantity | |
| | | Days or Usage | |
| PAM03 | C001 | Composite Unit of Measure | X |
| | | To identify a composite unit of measure (See Figures Appendix for examples of use) | |
| >> C00101 | 355 | Unit or Basis for Measurement Code | M ID 2/2 |
| | | 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 | |
| | | TD Therms | |
| PAM06 | 344 | Unit of Time Period or Interval | X ID 2/2 |
| | | Code indicating the time period or interval | |
| | | PM Preceding 12 Months | |
| | | Same Period Last Year | |
| PAM07 | 374 | Date/Time Qualifier | X ID 3/3 |
| | | Code specifying type of date or time, or both date and time | |
| | | 194 Period End | |
| PAM08 | 373 | Date | X DT 8/8 |
| | | Date expressed as CCYYMMDD | |

| | |
|------------------------|--|
| Segment: | MEA Measurements |
| Position: | 059 |
| Loop: | IT1 Optional |
| 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 C001) |
| Syntax Notes: | <ol style="list-style-type: none"> 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: | <ol style="list-style-type: none"> 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. 2 The MEA segment conveys both Reads and Usage. |
| Notes: | Ex: MEA**MU*1^ (Multiplier Only) MEA*AA***KH*1519*1613^ (Reads) MEA*AA***KH*0*1760*50^ (TOU – Winter Mid Peak) MEA*AA***KH*0*2000*75^ (TOU – Winter Off Peak) MEA*AA***K1*0*20*50^ (Demand – Winter Mid Peak) MEA*AA***K1*0*17*75^ (Demand – Winter Off Peak) |

Data Element Summary

| <u>Ref.</u> <u>Des.</u> | <u>Data</u> <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
|----------------------------|-------------------------------|--|-------------------|
| MEA01 | 737 | Measurement Reference ID Code | O ID 2/2 |
| | | Code identifying the broad category to which a measurement applies | |
| | | AA Meter reading-beginning actual/ending actual | |
| | | AE Meter reading-beginning actual/ending estimated | |
| | | BO Meter Reading as Billed | |
| | | Used when billing charges are based on contractual agreements or pre-established usage and not on actual usage | |
| | | Will be used to identify total consumption for non-metered services, e.g. streetlights. | |
| | | EA Meter reading-beginning estimated/ending actual | |
| | | EE Meter reading-beginning estimated/ending estimated | |
| MEA02 | 738 | Measurement Qualifier | O ID 1/3 |
| | | Code identifying a specific product or process characteristic to which a measurement applies | |
| | | Recommended for CA. | |
| | | MU Multiplier | |
| MEA03 | 739 | Measurement Value | X R 1/20 |
| | | The value of the measurement | |

| | | | | | |
|----|---------------|-------------|---|----------|---------------|
| | MEA04 | C001 | Composite Unit of Measure To identify a composite unit of measure (See Figures Appendix for examples of use) | X | |
| >> | C00101 | 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 <ul style="list-style-type: none"> K1 Kilowatt Demand Represents potential power load measured at predetermined intervals K3 Kilovolt Amperes Reactive Hour Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters KH Kilowatt Hour TD Therms | M | ID 2/2 |
| | MEA05 | 740 | Range Minimum The value specifying the minimum of the measurement range Beginning reading. | X | R 1/20 |
| | MEA06 | 741 | Range Maximum The value specifying the maximum of the measurement range Ending reading or single reading (e.g., demand). | X | R 1/20 |
| | MEA07 | 935 | Measurement Significance Code Code used to benchmark, qualify or further define a measurement value The UIG has made Data Maintenance Requests (DMs) for several codes. This document will be revised when the DMs are approved. Until then, the following non-standard code definitions will be used: Please note that PG&E does not presently use the codes in MEA07. Please refer to the SAC15 Code list on pages 45 and 46. <ul style="list-style-type: none"> 41 – Off Peak 42 – On Peak 43 – Mid Peak 45 - Summer On Peak 49 - Winter On Peak 50 - Winter Mid Peak 51 - Total 73 - Summer Off Peak 74 - Summer Mid Peak 75 - Winter Off Peak | O | ID 2/2 |

Segment: **REF** Reference Identification
Position: 120
Loop: IT1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes:

Ex:
REF*MG*3065R3^
REF*NH*E19S V^

Data Element Summary

| Ref. | Data | Name | Attributes |
|--|---------|--|------------|
| Des. | Element | | |
| REF01 | 128 | Reference Identification Qualifier | M ID 2/3 |
| Code qualifying the Reference Identification | | | |
| | 06 | System Number | |
| | | A unique number assigned by the manufacturer to identify the initial computer system sold to the customer | |
| | | (Not presently used by PG&E) | |
| | 11 | Account Number | |
| | | (Not presently used by PG&E) | |
| | | Energy Service Provider-assigned account number for the end use customer. | |
| | | [Customer defined ID. Can be alphanumeric.] | |
| | 12 | Billing Account | |
| | | Account number under which billing is rendered | |
| | | Utility-assigned account number for the Energy Service Provider (Primary Key). | |
| | 45 | Old Account Number | |
| | | Identifies accounts being changed | |
| | | Previous Utility-assigned account number for the end use customer. | |
| | 46 | Old Meter Number | |
| | | Identifies meters being removed | |
| | 5B | PG&E – SA-ID | |
| | | Service Agreement Identification | |
| | CR | Customer Reference Number | |
| | | Identifies PG&E assigned reference number for Direct Access accounts. | |
| | LI | Line Item Identifier | |
| | | Identifies customer assigned coding. | |
| | LU | Location Number | |
| | | Identification number for the point where service is delivered to the customer. | |
| | | SPDI - Service Point Delivery Indicator for future use. When LU is used, SPDI number will be represented in REF03. | |
| | MG | Meter Number | |

| | | | | |
|--------------|------------|---|---|------------------|
| | | NH | Rate Card Number | |
| | | | Rate Schedule. | |
| | | RU | Route Number | |
| | | | Identifies the Meter Reading Serial. | |
| | | ZZ | User defined. | |
| 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 | | |
| | | | Meter Number or Account Number if unmetered Rate Code | |
| REF03 | 352 | Description | | X AN 1/80 |
| | | A free-form description to clarify the related data elements and their content | | |

| | |
|------------------------|---|
| Segment: | DTM Date/Time Reference |
| Position: | 150 |
| Loop: | IT1 Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 10 |
| Purpose: | To specify pertinent dates and times |
| Syntax Notes: | <ol style="list-style-type: none"> 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: | 1 These dates represent the Start and End Period dates in the Account or Meter Loop. |
| Notes: | Ex: DTM*150****D8*19990423^ DTM*151****D8*19990521^ |

| Data Element Summary | | | | |
|----------------------|---------|---|------------|---------|
| Ref. | Data | Name | Attributes | |
| Des. | Element | | | |
| >> DTM01 | 374 | Date/Time Qualifier | M | ID 3/3 |
| | | Code specifying type of date or time, or both date and time | | |
| | | 150 Service Period Start | | |
| | | Invoice period start date. | | |
| | | 151 Service Period End | | |
| | | Invoice period end date. | | |
| | | 514 Transferred | | |
| | | Exchanged meter read date. . Not used by PG&E | | |
| DTM02 | 373 | Date | X | DT 8/8 |
| | | Expression of a date, eight characters. | | |
| DTM05 | 1250 | Date Time Period Format Qualifier | X | ID 2/3 |
| | | Code indicating the date format, time format, or date and time format | | |
| | | D8 Date Expressed in Format CCYYMMDD | | |
| DTM06 | 1251 | Date Time Period | X | AN 1/35 |
| | | Expression of a date, a time, or range of dates, times or dates and times | | |

| | |
|------------------------|--|
| Segment: | SLN Subline Item Detail |
| Position: | 200 |
| Loop: | SLN Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To specify product subline detail item data |
| Syntax Notes: | |
| Semantic Notes: | <ol style="list-style-type: none"> 1 SLN01 is the identifying number for the subline item. 2 SLN03 is the configuration code indicating the relationship of the subline item to the baseline item. |
| Comments: | <ol style="list-style-type: none"> 1 The IT1/SLN segment is used to overcome the limitation on the number of IT1/SAC loops. 2 Each SLN loop will contain only one SAC and TXI. Multiple charges/allowances require multiple SLN loops. |
| Notes: | <p>Ex:</p> <p>SLN*CHG0000200003**A^ (Charge)</p> <p>SLN*UNB0000200005**A^ (Unbundled)</p> <p>SLN*BAS00002000010**A^ (Electric Baseline)</p> |

| Data Element Summary | | | | |
|----------------------|---------|---|---------------------------------------|------------------|
| Ref. | Data | | | |
| Des. | Element | Name | Attributes | |
| >> | SLN01 | 350 | Assigned Identification | M AN 1/20 |
| | | Alphanumeric characters assigned for differentiation within a transaction set | | |
| | | Used as a loop counter. | | |
| >> | SLN03 | 662 | Relationship Code | M ID 1/1 |
| | | Code indicating the relationship between entities | | |
| | | A | Add | |
| >> | SLN09 | 235 | Product/Service Qualifier Code | M ID 1/1 |
| | | Code identifying type/source of the descriptive data if product service id (SLN 10) | | |
| | | SV | Service Rendered | |
| >> | SLN10 | 234 | Product Service Id | M ID 1/1 |
| | | Identifying data for product or service | | |

Segment: **REF** Reference Identification
Position: 210
Loop: IT1 Optional
Level: Detail
Usage: Optional
Max Use: >1
Purpose: To specify identifying information
Syntax Notes: 1 At least one of REF02 or REF03 is required.
Semantic Notes:
Comments:
Notes:

Ex:
REF*MG*3065R3^
REF*NH*E19S V^

Data Element Summary

| Ref. | Data | Name | Attributes |
|----------|---------|--|-----------------|
| Des. | Element | | |
| >> REF01 | 128 | Reference Identification Qualifier | M ID 2/3 |
| | | Code qualifying the Reference Identification | |
| | 06 | System Number | |
| | | A unique number assigned by the manufacturer to identify the initial computer system sold to the customer | |
| | | (Not presently used by PG&E) | |
| | 11 | Account Number | |
| | | (Not presently used by PG&E) | |
| | | Energy Service Provider-assigned account number for the end use customer. | |
| | | [Customer defined ID. Can be alphanumeric.] | |
| | 12 | Billing Account | |
| | | Account number under which billing is rendered | |
| | | Utility-assigned account number for the Energy Service Provider (Primary Key). | |
| | 45 | Old Account Number | |
| | | Identifies accounts being changed | |
| | | Previous Utility-assigned account number for the end use customer. | |
| | 46 | Old Meter Number | |
| | | Identifies meters being removed | |
| | 5B | PG&E – SA-ID | |
| | | Service Agreement Identification | |
| | CR | Customer Reference Number | |
| | | Identifies PG&E assigned reference number for Direct Access accounts. | |
| | LI | Line Item Identifier | |
| | | Identifies customer assigned coding. | |
| | LU | Location Number | |
| | | Identification number for the point where service is delivered to the customer. | |
| | | SPDI - Service Point Delivery Indicator for future use. When LU is used, SPDI number will be represented in REF03. | |
| | MG | Meter Number | |

| | | | | |
|--------------|------------|---|--------------------------------------|------------------|
| | | NH | Rate Card Number | |
| | | | Rate Schedule. | |
| | | RU | Route Number | |
| | | | Identifies the Meter Reading Serial. | |
| | | ZZ | User defined. | |
| 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 | | |
| | | Meter Number or Account Number if unmetered Rate Code | | |
| REF03 | 352 | Description | | X AN 1/80 |
| | | A free-form description to clarify the related data elements and their content | | |

| | |
|------------------------|--|
| Segment: | SAC Service, Promotion, Allowance, or Charge Information |
| Position: | 230 |
| Loop: | SLN Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 25 |
| 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: | <ol style="list-style-type: none"> 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: | <ol style="list-style-type: none"> 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: | <ol style="list-style-type: none"> 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 Each SLN loop will contain only one SAC and TXI. Multiple charge/allowances require multiple SLN loops. 3 Meter specific information for KH or Therms. |
| Notes: | Ex: SAC*A**EU*RRR000*.-27980*****REROUTES CREDIT^ SAC*C**EU*SUR000*42*****ELECTRIC SURCHARGE^ SAC*C**EU*BAS001*22032*****KH*2082*****TOTAL CHARGES ELECTRIC^ SAC*A**EU*DSC011*.-2203*****LEGISLATED 10% REDUCTION^ SAC*N**EU*ENCXXX*6767***.0325*****ELECTRIC ENERGY CHARGE^ SAC*N**EU*GTC001*1192*****TRANSMISSION^ SAC*N**EU*DIS001*6347*****DISTRIBUTION^ SAC*N**EU*MSC0247*761*****PUBLIC PURPOSE PROGRAMS^ SAC*N**EU*MSC025*100*****NUCLEAR DECOMMISSIONING^ SAC*N**EU*MSC022*1945*****COMPETITIVE TRANSITION CHARGE - CTC^ SAC*N**EU*MSC023*2717*****TRUST TRANSFER AMOUNT^ SAC*C**EU*ENC001*6818****TD*102*****TOTAL GAS CHARGES^ |

Data Element Summary

| Ref. | Data | Name | Attributes |
|------|---------|---|--|
| Des. | Element | | |
| >> | SAC01 | 248 Allowance or Charge Indicator | M ID 1/1 |
| | | Code which indicates an allowance or charge for the service specified | |
| | | A Allowance | |
| | | C Charge | |
| | | | The amount in SAC05 should be included when summing the invoice total. |
| | | N No Allowance or Charge | |
| | | | The amount in SAC05 should be ignored when summing the invoice total. |
| | | | Energy charge information only. |

| | | | | |
|-------|------|--|---|---------|
| SAC03 | 559 | Agency Qualifier Code | X | ID 2/2 |
| | | Code identifying the agency assigning the code values | | |
| | | EU Electric Utilities | | |
| | | Use this code until the DM for "UT" code is approved. | | |
| SAC04 | 1301 | Agency Service, Promotion, Allowance, or Charge Code | X | AN 1/10 |
| | | Agency maintained code identifying the service, promotion, allowance, or charge | | |
| | | The Utility Industry Group maintains this code list. See the UIG website at http://www.uig.org or contact a UIG member for implementation details. The most current listing of codes will be available on the web site. | | |
| | | When using Transfer Credit/Transfer Debit, use Code TRS000 (described in SAC15). | | |
| SAC05 | 610 | Amount | O | N2 1/15 |
| | | Monetary amount | | |
| | | The recommendation for use in California is that this amount will contain the actual value (positive or negative). | | |
| SAC06 | 378 | Allowance/Charge Percent Qualifier | X | ID 1/1 |
| | | Code indicating on what basis allowance or charge percent is calculated | | |
| | | Z Mutually Defined | | |
| | | Used for percent participation. | | |
| SAC07 | 332 | Percent | X | R 1/6 |
| | | Percent expressed as a percent | | |
| | | e.g., 75% should be expressed as 75. | | |
| SAC08 | 118 | Rate | O | R 1/9 |
| | | Rate expressed in the standard monetary denomination for the currency specified | | |
| SAC09 | 355 | Unit or Basis for Measurement Code | X | ID 2/2 |
| | | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | |
| | | K1 Kilowatt Demand | | |
| | | Represents potential power load measured at predetermined intervals | | |
| | | K3 Kilovolt Amperes Reactive Hour | | |
| | | Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters | | |
| | | KH Kilowatt Hour | | |
| | | TD Therms | | |
| SAC10 | 380 | Quantity | X | R 1/15 |
| | | Numeric value of quantity | | |
| | | Number of units invoiced. | | |
| SAC15 | 352 | Description | X | AN 1/80 |
| | | A free-form description to clarify the related data elements and their content | | |
| | | Detailed description of service, promotion, allowance, or charge. | | |
| | | Code List on following page. | | |

SAC15 CODE LIST

| SAC04 | SAC15 |
|--------|---|
| ADJ000 | TOTAL ENERGY ADJUSTMENTS |
| ADJ0BC | BILL CORRECTION AT THE SERVICE AGREEMENT LEVEL A BILL CORRECTION IS DEFINED AS A CANCELLED BILL OR REBATED RE-BILL |
| BAS000 | BASELINE QUANTITY |
| BAS001 | CUSTOMER CHARGE |
| CRE000 | REVENUE CYCLE SERVICE CREDIT |
| CRE000 | ELECTRIC REFUND CREDIT |
| CRE000 | GAS REFUND CREDIT |
| CRE000 | GAS REFUND CREDIT - LGS |
| CRE000 | PROCUREMENT CREDIT |
| CRE014 | DIRECT ACCESS ENERGY CREDIT |
| DIS001 | DISTRIBUTION |
| DMD011 | SUMMER DEMAND OFF-PEAK |
| DMD012 | SUMMER DEMAND PEAK |
| DMD013 | SUMMER DEMAND PARTIAL-PEAK |
| DMD016 | WINTER DEMAND PEAK |
| DMD017 | WINTER DEMAND PARTIAL-PEAK |
| DMD018 | WINTER DEMAND OFF-PEAK |
| DMD024 | BILLING DEMAND SUMMER |
| DMD025 | BILLING DEMAND WINTER |
| DMD032 | CREATED DEMAND |
| DSC004 | ECONOMIC STIMULUS RATE CREDIT |
| DSC005 | TOTAL CARE DISCOUNTS |
| DSC010 | DWELLING UNIT DISCOUNT |
| DSC011 | LEGISLATED 10% REDUCTION |
| ENC000 | NET CHARGES |
| ENC000 | CARE BASELINE USAGE |
| ENC000 | TOTAL CHARGES |
| ENC001 | ELECTRIC CHARGES |
| ENC001 | GAS CHARGES |
| ENC001 | ENERGY CHARGES |
| ENC001 | GENERATION |
| ENC004 | OFF PEAK USAGE SUMMER |
| ENC005 | PEAK USAGE SUMMER |
| ENC006 | PARTIAL PEAK USAGE SUMMER |
| ENC009 | PEAK USAGE WINTER |
| ENC010 | PARTIAL PEAK USAGE WINTER |
| ENC011 | OFF PEAK USAGE WINTER |
| ENC037 | BASELINE USAGE |
| ENC038 | OVER BASELINE USAGE |

| | |
|--------|-------------------------------------|
| SAC04 | SAC15 |
| | |
| ENC038 | 101 – 130% OF BASELINE |
| ENC038 | 131 – 200% OF BASELINE |
| ENC038 | 201 – 300% OF BASELINE |
| ENC038 | OVER 300% OF BASELINE |
| GTC001 | TRANSMISSION |
| MSC000 | WINTER RATE/KWH |
| MSC000 | SUMMER RATE/KWH |
| MSC000 | POWER FACTOR ADJUSTMENT |
| MSC022 | COMPETITIVE TRANSITION CHARGE - CTC |
| MSC023 | TRUST TRANSFER AMOUNT |
| MSC024 | PUBLIC PURPOSE PROGRAMS |
| MSC025 | NUCLEAR DECOMMISSIONING |
| MSC026 | DWR BOND CHARGE |
| PFA001 | POWER FACTOR ADJUSTMENT |
| SER000 | MINIMUM CHARGE |
| SMD016 | METER CHARGE |
| SUR000 | FRANCHISE FEE SURCHARGE |
| SUR000 | ENERGY COMMISSION TAX |
| SUR000 | BEGINS “ES” (ENERGY SURCHARGES) |
| SUR000 | UTILITY USER’S TAX |

| | |
|------------------------|--|
| Segment: | N1 Name |
| Position: | 240 |
| Loop: | N1 Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To identify a party by type of organization, name, and code |
| Syntax Notes: | 1 At least one of N102 or N103 is required. 2 If either N103 or N104 is present, then the other is required. |
| Semantic Notes: | |
| Comments: | 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party. |
| Notes: | Ex: N1*8R*RANDY JACKSON^ N1*8S*PACIFIC GAS & ELECTRIC*9*00691287702^ |

| Data Element Summary | | | | |
|----------------------|---------|------|---|-----------|
| Ref. | Data | Name | Attributes | |
| Des. | Element | | | |
| >> | N101 | 98 | Entity Identifier Code | M ID 2/3 |
| | | | Code identifying an organizational entity, a physical location, property or an individual | |
| | | 8R | Consumer Service Provider (CSP) Customer | |
| | | | End use Customer. | |
| | | 8S | Consumer Service Provider (CSP) | |
| | | | Utility. | |
| | | MQ | Service Address | |
| | | SJ | Energy Service Provider (ESP) | |
| | N102 | 93 | Name | X AN 1/60 |
| | | | Free-form name | |
| | | | Entity ID Code 8R = Customer Name | |
| | | | Entity ID Code 8S = Utility Name | |
| | N103 | 66 | Identification Code Qualifier | X 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 | |
| | N104 | 67 | Identification Code | X AN 2/80 |
| | | | Code identifying a party or other code | |

Segment: **N2** Additional Name Information
Position: 250
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify additional names or those longer than 35 characters in length
Syntax Notes:
Semantic Notes:
Comments:
Notes: Ex: N2*GENERAL SVCS DEPT^

| Data Element Summary | | | |
|----------------------|----------------|---|-------------------|
| Ref. | Data | | |
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| >> | N201 | 93 Name | M AN 1/60 |
| | | Free-form name To specify names or additional information that is required (i.e. ID numbers, etc.) | |
| | N202 | 93 Name | O AN 1/60 |
| | | Free-form name | |

Segment: **N3** Address Information
Position: 260
Loop: N1 Optional
Level: Detail
Usage: Optional
Max Use: 2
Purpose: To specify the location of the named party
Syntax Notes:
Semantic Notes:
Comments:
Notes: Ex: N3*37 MAIN ST^

Data Element Summary

| Ref. | Data | | |
|-------------|----------------|--|-------------------|
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| >> N301 | 166 | Address Information Address information | M AN 1/55 |
| N302 | 166 | Address Information Address information | O AN 1/55 |

| | |
|------------------------|--|
| Segment: | N4 Geographic Location |
| Position: | 270 |
| Loop: | N1 Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 1 |
| Purpose: | To specify the geographic place of the named party |
| Syntax Notes: | |
| Semantic Notes: | |
| Comments: | <p>1 A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</p> <p>2 N402 is required only if city name (N401) is in the U.S. or Canada.</p> |
| Notes: | Ex: N4*SAN JOSE*CA*93268^ |

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

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).
Comments: 1 This must equal the algebraic sum of the amounts in the TXI02 and SAC05 (A and C) amounts. TDS01 is the total amount due for this invoice. If this amount is negative send the minus sign.

Notes: Ex: TDS*41901^
TDS*-13005833^a

Data Element Summary

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

| | |
|------------------------|--|
| Segment: | SAC Service, Promotion, Allowance, or Charge Information |
| Position: | 040 |
| Loop: | SLN Optional |
| Level: | Detail |
| Usage: | Optional |
| Max Use: | 25 |
| 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: | <ol style="list-style-type: none"> 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: | <ol style="list-style-type: none"> 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: | <ol style="list-style-type: none"> 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. 4 Each SLN loop will contain only one SAC and TXI. Multiple charge/allowances require multiple SLN loops. 5 Meter specific information for KH or Therms. |
| Notes: | Ex: SAC*A**EU*RRR000*.-27980*****REROUTES CREDIT^ SAC*C**EU*SUR000*42*****ELECTRIC SURCHARGE^ SAC*C**EU*BAS001*22032*****KH*2082*****TOTAL CHARGES ELECTRIC^ SAC*A**EU*DSC011*.-2203*****LEGISLATED 10% REDUCTION^ SAC*N**EU*ENCXXX*6767***.0325*****ELECTRIC ENERGY CHARGE^ SAC*N**EU*GTC001*1192*****TRANSMISSION^ SAC*N**EU*DIS001*6347*****DISTRIBUTION^ SAC*N**EU*MSC0247*761*****PUBLIC PURPOSE PROGRAMS^ SAC*N**EU*MSC025*100*****NUCLEAR DECOMMISSIONING^ SAC*N**EU*MSC022*1945*****COMPETITIVE TRANSITION CHARGE - CTC^ SAC*N**EU*MSC023*2717*****TRUST TRANSFER AMOUNT^ SAC*C**EU*ENC001*6818****TD*102*****TOTAL GAS CHARGES^ |

Data Element Summary

| Ref. | Data | Name | Attributes |
|----------|---------|---|--|
| Des. | Element | | |
| >> SAC01 | 248 | Allowance or Charge Indicator | M ID 1/1 |
| | | Code which indicates an allowance or charge for the service specified | |
| | | A | Allowance |
| | | C | Charge |
| | | | The amount in SAC05 should be included when summing the invoice total. |
| | | N | No Allowance or Charge |
| | | | The amount in SAC05 should be ignored when summing the invoice total. |
| | | | Energy charge information only. |

| | | | | |
|-------|------|--|---|---------|
| SAC03 | 559 | Agency Qualifier Code | X | ID 2/2 |
| | | Code identifying the agency assigning the code values | | |
| | | EU Electric Utilities | | |
| | | Use this code until the DM for "UT" code is approved. | | |
| SAC04 | 1301 | Agency Service, Promotion, Allowance, or Charge Code | X | AN 1/10 |
| | | Agency maintained code identifying the service, promotion, allowance, or charge | | |
| | | The Utility Industry Group maintains this code list. See the UIG website at http://www.uig.org or contact a UIG member for implementation details. The most current listing of codes will be available on the web site. | | |
| | | When using Transfer Credit/Transfer Debit, use Code TRS000 (described in SAC15). | | |
| SAC05 | 610 | Amount | O | N2 1/15 |
| | | Monetary amount | | |
| | | The recommendation for use in California is that this amount will contain the actual value (positive or negative). | | |
| SAC06 | 378 | Allowance/Charge Percent Qualifier | X | ID 1/1 |
| | | Code indicating on what basis allowance or charge percent is calculated | | |
| | | Z Mutually Defined | | |
| | | Used for percent participation. | | |
| SAC07 | 332 | Percent | X | R 1/6 |
| | | Percent expressed as a percent | | |
| | | e.g., 75% should be expressed as 75. | | |
| SAC08 | 118 | Rate | O | R 1/9 |
| | | Rate expressed in the standard monetary denomination for the currency specified | | |
| SAC09 | 355 | Unit or Basis for Measurement Code | X | ID 2/2 |
| | | Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken | | |
| | | K1 Kilowatt Demand | | |
| | | Represents potential power load measured at predetermined intervals | | |
| | | K3 Kilovolt Amperes Reactive Hour | | |
| | | Represents actual electricity equivalent to kilowatt hours; billable when usage meets or exceeds defined parameters | | |
| | | KH Kilowatt Hour | | |
| | | TD Therms | | |
| SAC10 | 380 | Quantity | X | R 1/15 |
| | | Numeric value of quantity | | |
| | | Number of units invoiced. | | |
| SAC15 | 352 | Description | X | AN 1/80 |
| | | A free-form description to clarify the related data elements and their content | | |
| | | Detailed description of service, promotion, allowance, or charge. | | |
| | | Code List on following page. | | |

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
Syntax Notes:
Semantic Notes:
Comments: **1** This segment is intended to provide hash totals to validate transaction completeness and correctness.
Notes: Ex: CTT*2^

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

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: Ex: SE*50*000000107^

Data Element Summary

| Ref. | Data | | |
|-------------|----------------|---|-------------------|
| <u>Des.</u> | <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
| >> SE01 | 96 | Number of Included Segments | M N0 1/10 |
| | | Total number of segments included in a transaction set including ST and SE segments | |
| >> 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 | |
| | | Same as corresponding ST02. | |

| | |
|------------------------|---|
| Segment: | GE Functional Group Trailer |
| Position: | 030 |
| Loop: | |
| Level: | |
| Usage: | Mandatory |
| Max Use: | 1 |
| Purpose: | To indicate the end of a functional group and to provide control information |
| Syntax Notes: | |
| Semantic Notes: | 1 The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06. |
| Comments: | 1 The use of identical data interchange control numbers in the associated functional group header and trailer is designed to maximize functional group integrity. The control number is the same as that used in the corresponding header. |
| Notes: | Ex: GE 1 43 ^a |

Data Element Summary

| | Ref. | Data | Name | Attributes |
|----------|-------------|----------------|--|-------------------|
| | Des. | Element | | |
| M | GE01 | 97 | Number of Transaction Sets Included | M N0 1/6 |
| | | | Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element | |
| M | GE02 | 28 | Group Control Number | M N0 1/9 |
| | | | Assigned number originated and maintained by the sender | |

Segment: **IEA** Interchange Control Trailer

Position: 040

Loop:

Level:

Usage: Mandatory

Max Use: 1

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

Syntax Notes:

Semantic Notes:

Comments:

Notes: Ex: IEA|1|00000123^a

Data Element Summary

| | <u>Ref.</u> <u>Des.</u> | <u>Data</u> <u>Element</u> | <u>Name</u> | <u>Attributes</u> |
|---|----------------------------|-------------------------------|---|-------------------|
| M | IEA01 | I16 | Number of Included Functional Groups | M N0 1/5 |
| | | | A count of the number of functional groups included in an interchange | |
| M | IEA02 | I12 | Interchange Control Number | M N0 9/9 |
| | | | A control number assigned by the interchange sender | |