*Quick Reference Guide, Release 1.11.1.2*

# Oracle Utilities Load Analysis

## *Format Conventions*

The formats for creating input files use the following conventions:

| Element | Meaning |
|---|---|
| **KEYword** | Key words appear as a combination of upper- and lowercase letters. Typically, you need enter only the first three letters, which appear in uppercase. |
| { } | Braces contain a set of choices, from which you must choose one. |
| [ ] | Brackets contain parameters that are optional. |
| \| | Vertical bars separate mutually exclusive choices. |
| *time1* | Variable names or other information that you provide appears in italics. |
| DEFault | Default values are underlined. The system will use these values if no others are provided. |

| Application Name | Program Description |
|---|---|
| X110 | Enhanced Direct Input (CLDB); See Oracle Utilities Load Analysis Load Data Management User's Guide |
| X120 | Manual Entry (CLDB) |
| X170 | AXDB Summary Reporter |
| X180 | AXDB Update |
| X210 | Cut Series Validation |
| X220 | Invalid Series Validation (Key Generator) |
| X310 | Load Data Editor |
| X320 | Load Data Editor Syntax Scan |
| X370 | Individual Customer Analysis (CLDB) (Analysis Bundle) |
| X400 | Time Series Reporter |
| X410 | Load Data Reporter (CLDB) |
| X420 | Load Data Reporter (ALDB) |
| X430 | Totalizing Reporter (Reporting Bundle) |
| X440 | CLDB Summary Reporter |
| X460 | ALDB Summary Reporter |
| X470 | Late Cut Reporter (Reporting Bundle) |
| X480 | Validation Statistics Reporter (Reporting Bundle) |
| X490 | CLDB Cut Series Gap Reporter |
| X491 | ALDB Cut Series Gap Reporter |
| X530 | CLDB Cut Series Overlap Reporter |
| X531 | ALDB Cut Series Overlap Reporter |
| X620 | Load Data Transformation (CLDB) |
| X660 | Load Data Retrieval (ALDB) |
| X670 | Proxy Day Selection (Analysis Bundle) |
| X710 | Statistical Package Interface (CLDB) |
| X720 | Direct Output (CLDB) |
| X740 | Direct Output (ALDB) |
| X760 | Day Type Analysis (CLDB) |
| X770 | Day Type Analysis (ALDB) |
| X810 | CLDB Key Generator |
| X820 | ALDB Key Generator |
| X910 | Scan, Archive/Delete |
| Q91C | Copy Cuts |
| Q91D | Delete Cuts |
| Q91M | Move Cuts |

**X170 —AXDB Summary Reporter**

Environment File—TGX17B

**SELect {D | S | T | V | ALL}**

**X180 —AXDB Update**

Control File—TGX18A

*customer-id, channel* [,*start-time*] ,*text-field*

Control File for Record type V:

*customer-id, channel, n* (where n is an integer from 1 - 999)

Environment File—TGX18B

**RECord** {**D | S | T | V**}

**DATe**

**MODe {ADD| DEL [ALL] | REP}**

**X210 —Cut Series Validation**

Control File—TGX21A

*customer-id, channel*

Environment File—TGX21B

**BLOck** *n*

**DATe** [*start–time*] [*stop–time*]

**DIP** [*n* | 0 [*p*% | 50%] ]

**ENErgy** [**OFF** | *e1,e2* | 0.98,1.02]

**EXEmpt** [*ValidationTest UOM1 UOM2 ... UOMn*]

**HIGh** *n.n* [*i* | 0]

**LOW** *n.n* [*i* | 0]

**METer** [*m1,m2* | 1,1 ]

**MULtiplier** [*n.n* | 1.0]

**NNS** [*Non-normal status codes*]

**NONnormal** [*n* | 0] [CON]

**OUTage** [*k* | 0] [CON]

**REPort** [**CUTs** | **SERies**]

**SPIke** [*n* | 0] [*p*% | 50%]

**STA** [*status code list*]

**TIMe** [ [*mm1*][*:ss1*],[*mm2*][*:ss2*] | 60,15]

**WARning DES1** *name start length . . .***DES5** *name start length* **STAtus** *status-codes*

**ZERo** [*m* | *n*% | **OFF**]

**X220 —Invalid Series Validation (Key Generator)**

Control File—TGY11A (See X810)

* Note: Print statement must only produce customer-id, channel

**X310 —Load Data Editor**

Control File—TGX31A

Cut Commands—

**CHAnge** *key1* **TO** *key2*

**COPy** *key1* **TO** *key2*

**EGAp** *custid*, *channel* [*start-time*] [*stop-time*]

**ERAse** *key*

**KEY** *customer-id*, *channel(s)*, *start-time* [**,ORIGINAL**]

**NEW** *custid channel start stop* **FROM** *custid channel start* [*meter start*] [*meter stop*]

**REStore** *key*

**SPLit** *key* **AT** *time* [**NEWkey** *customer-id* [,*channel*]] **METer** *value* [**NEWkey** *customer-id* [,*channel*]]

†Correction Commands—

**ADDition** {*time1* | **START**}{*time2* | **STOP**} *z*

**AVErage** [*start* | **APPend**] [*stop* | *#ints*] [**I** | **O**] [**AW** | **AD**] [**W1** *Start* | -3] [**W2** *Stop* | 3] [**Q** [*q* | 8]] [**S** [*s* | J]]

**CALculate**

**DELete** {*time1* | **START**} {*time2* | **STOP** | **DO** *n*}

**INSert** {*time1* | **APPend**} {*time2* | **DO** *n*} {**Value** *z* | **From** *key* **AT** *time3*}

**INTerpolate** *time1* {*time2* | **DO** *n*} [**Q** [*q* | 8]] [**S** [*s* | J]]

**MODify** *time* [**Status** *s*] **Value** *z1* [*z2 z3... z29*]

**MULtiply** {*time1* | **START**}{*time2* | **STOP**} *n*

**OVErwrite** *time1* {*time2* | **DO** *n*}{**Value** *z* | **Status** *s* | **Value** *z* **Status** *s* | **From** *key* **AT** *time3*}

**PROrate STAtus** [*s* | *] [**MAX** *x* | 32760] [**MIN** *n* | 0] [**MET** *ngy*]

**READing** *time r* [*#dials* [.*#decimals*] ]

**REMark** [*remark*]

**SET** *field value*

**SMOoth** [**HIGh** | **LOW**] [**Value** *z* | 0] [**DO** *n* | 1] [**Status** *s* | **K**]

**STAtus** {old_sta | *} new_sta **DATe** {start [stop]} **INT** {low_int [TO high_int]}

†Note—Must be preceded by '**KEY**' Cut Command

(Continued next page)

**X310 —Load Data Editor** (Continued)

**SET UOM**
**SET DESCRIPTOR (DES)**
**SET SECONDS-PER-INTERVAL (SPI)**
**SET METER-MULTiplier** *mmult*
**SET METER-OFFSET** *moffset*
**SET METER-START** *time*
**SET METER-STOP** *time*
**SET PULSE-MULTiplier** *pmult*
**SET PULSE-OFFSET** *poffset*
**SET TIME-ZONE-STANDARD-NAME** (**TZS**|**TZSN**) *tzsn*
**SET ARCHIVE** {**YES** | **ON**}or {**NO** | **OFF**}
**SET MERGE** {**YES** | **ON**}or {**NO** | **OFF**}
**SET POPulation** *popln*
**SET WEIght** *weight*

Environment File—TGX31B

**AUDit** [**OFF** | **ON**]
**EXEcute** [**OFF** | **ON**]
**PRInt** [**ECOnomize** | **FULl**]
**MERge** [**YES** | **NO**]
**GRA**

**X320 —Load Data Editor Syntax Scan**

Control File—TGX31A (See X310, Control File)

Environment File—TGX31B

**AUDit** [**OFF** | **ON**]
**EXEcute** [**OFF** | **ON**]
**PRInt** [**ECOnomize** | **FULl**]

**X370 —Individual Customer Analysis (CLDB) (Analysis Bundle)**

(See Y370)

**X400— Time Series Reporter**

Control File—TGX40A

**KEY** *customer-id*, *channel* [,*start-date*] [,**SUM** | ,**NOSum**] [,**PEAk** | ,**NOPeak**] [,**CLAss**] [,**DEC** (*n*) | ,**DEC** (2)] [**CHI1** '*head1*'] [**CH2** '*head2*']

**REPort** *report-name*

**TL**n [*title-line* | **NULL** | **BLANK**]

Environment File—TGX40B

**AGGregate** [*n* | 0]

**DATe** *start-date stop-date*

**FILe** [**YES** [**BLOCK** | **NOBlock**] | **NO**]

**X410 —Load Data Reporter (CLDB)**

Control File—TGX41A

*customer-id*, *channel* [,*start-time*] [,**ENErgy**]
[**SCHedule** [n | 0 ] ] [,**AGGregate** [n | 0] ]
[,**ROLling** [n | 3600 [‘q’ | ‘8’] ] ]
[,**PEAk**][,**MINimum**][,**DAIly**][,**SUMmary**]

Environment File—TGX41B

**ACTive**
**AGGregate** [*n* | 3600]
**DAIly**
**DATe** [*start-time*] [*stop-time*]
**DEMand** [**SPReadsheet** | **NOSpreadsheet**] [**NOReport** | **REPort**]
**ENErgy** [**SPReadsheet** | **NOSpreadsheet**] [**NOReport** | **REPort**]
**GRA**
**INActive**
**MERge** [**YES** | **NO** | **EXClude**]
**MINimum**
**NUMber** [*n* | 10]
**ORIginal** [**INActive** | **Active**]
**PEA**k
**ROLling** [*n* | 3600 [‘*q*’ | ‘8’] ]
**SCHedule** [*t* | 0 ]
**RUN STA** <*un-delimited list of status codes*>
**RUN INT** [<value> | <*lower*> TO <*upper*>]
**RUN INS** <*interval value*> <*status code*>
**SEAson** [*s* | 0 [,**PRInt** | ,**NOPrint**] ]
**SEParate**
**SOUrce** [**CLDB** [**BOTH**] [2] ]
**SUBset** [**YES** | **NO**]
**SUMmary**
**XML**

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY31E

*season-sch# season# tou-sch# date-range* [*season name*]

**X420 —Load Data Reporter (ALDB) (See X410)**

**SOUrce** [**ALDB** [2] ]

**X430 —Totalizing Reporter (Reporting Bundle)**

Control File—TGX43A

**ACC**umulate [*subtitle*]
**AGGregate** [*n* | 3600]
**BLOck** [*block title*]
**DATe** *start-time stop-time* [**PAGe**]
**END** '*label*' [*customer-id channel*] [**SKIp** *n* | **PAGe**]
**KEY** *customer-id channel* [**SUB** | **ADD**] [**MULT** [*n.m* | 1.0] ] ['*comment*']
**MERge** [**YES** | **NO**]
**REMark** ['*remark*']
**SCHedule** [*n* | 0 ]
**TLn** [*title* | **BLANK** | **NULL**]

Environment File—TGX43B

**GRA**
**HIGhest** [*n* | 3 [**AVErage** | **AVG**] [**CPK**] ]
**QUAlity** ['q' | '8']
**REPort** [**SUMmary** | **NONe** | **ALL**]
**SAVe** [**REPlace**] [**ARChive**]
**STAtus** [**YES** | **ALL** | **NO**]
**STOp** [**NO** | **YES**]
**UOMcheck** {**NO** | **YES** [**METhod** | **LEGacy**]} or {**OFF** | **ON**}
**VALid** [**NO** | **YES**]

Holiday File—TGX43C

*mm/dd/yy*

Time-of-use Schedule File—TGX43D

*sch# period day-list time-range* [*comment*]

**X440 —CLDB Summary Reporter**

Control File—TGX44A (optional)

*customer-id, channel*

Environment File—TGX44B (optional)

**DATe** [*start-time stop-time* | **ALL**]
**DIPs**
**FACtor**
**HOUrs**
**MAXimum**
[**NOEdit** | **EDIT**]
**OUTages**
**SELect** [**KEY** | **ALL**]
**SOUrce {CLDB}**
**SPIkes**

**X460 —ALDB Summary Reporter** (See X440)

**SOUrce {ALDB}**

**X470 —Late Cut Reporter (Reporting Bundle)**

Control File—TGX47A

*customer-id, channel*

Environment File—TGX47B

**DATe** *cut-off time*
**SELect** [**ALL** | **KEY**]

**X480 —Validation Statistics Reporter (Reporting Bundle)**

Control File – TGX48A

*customer-id, channel, start-time*

**X490 —CLDB Cut Series Gap Reporter**

Control File – TGX49A (optional)

*customer-id*, *channel*

Environment File – TGX49B (optional)

**DATe** [*start-time stop time* | **ALL**]

**PRInt** [**GAP** | **ALL**]

**QUAlity** [‘*q*’ | ‘8’] ]

**SELect** [**KEY** | **ALL**]

**SOUrce** {**CLDB**}

**TITle** *optional-user-title*

**X491 —ALDB Cut Series Gap Reporter** (See X490)

**SOUrce {ALDB}**

**X530 —CLDB Cut Series Overlap Reporter**

Control File – TGX53A (optional)

*customer-id, channel*

Environment File – TGX53B (optional)

**DATe** [*start-time stop time* | **ALL**]

**OUTput** [ **CSV | FIX**]

**PRInt** [**OVErlaps** | **ALL**]

**SELect** [**KEY** | **ALL**]

**SOUrce {CLDB}**

**TITle** *optional-user-title*

**TOLerance** *number of overlapping intervals to tolerate*

**X531 —ALDB Cut Series Overlap Reporter** (See X530)

**SOUrce {ALDB}**

**X620 —Load Data Transformation (CLDB)**

See Y620

**X660 —Load Data Retrieval (ALDB)**

Control File—TGX66A

*customer-id, channel*, [*start-time*]

Environment File—TGX66B

**DATe** [*start-time stop-time* | **ALL** | **ALL** *stop-time* | *start-time*]
**FLAgs** [**NOReset** | **RESet**]
**SELect** [**ALL** | **KEY**]

**X670 —Proxy Day Selection (Analysis Bundle)**

Environment File—TGX67B

**DATe** *start-time stop-time*
**DAYtype** [**DT** | **DOW** | **ANY**]
**DEG** *#degrees* [**AVG** | **MAX**] [**MISsing** *#hours*]
**HOLiday**
**INEligible**
**KEY** *custid*, *channel*, *start-time*
**MAGnitude** [*weight*]
**MERge** [**YES** | **NO**]
**NUM** *n*
**OUTput** [**CSV** | **LSE** | **XML** | **GRAph**]
**PEAk** [**MINutes**]
**PROxy** *custid*, *channel*
**SEAson** *s*
**SHApe** [*weight*]
**TEMp** *skey* [*pkey*]

Holiday File—TGY31C

*mm/dd/yy*

Season Schedule File—TGY31E

*Season-sch# season# tou-sch# start stop* [*comment*]

**X710 —Statistical Package Interface (CLDB)**

Control File—TGY71A

*custid*, *channel* [,*start-time*]

Environment File—TGY71B

**AGGregate** [*n* | 3600]
**DATe** *start-date stop-date*
**MERge** [YES | NO]
**QUAlity** [‘*q*’ | ‘8’]
**SOUrce** {**CLDB**}

**X720 —Direct Output (CLDB)**

Control File—TGY72A

*customer-id*, *channel* [,*start-time*][,*stop-time*][,**INActive** | ,**ACTive**] [,**CLAss**]

Environment File—TGY72B

**24Hradj** [**YES** | **NO**]

**AGGregate** [*n* | 0]

**CDAt** *start-date stop-date*

**CSV**

**DAIly** [**SENdout** [*h* | 0] ] [**BINary** | **CHAracter** [**CUSTid** *c*] [**MULtiplier** *m*] [**FOR** *x.y* | **FOR 7.3**] [**COMmas** | **BLAnks**] [**HEAder** | **NOHeader**] [**TIMezone** *t*] [**DATe** *date format*] ]

**DATe** *start-date stop-date*

**INP**

**LSE**

**MERge** [**YES** | **NO** | **EXClude**]

**ONErecord**

**QUAlity** [‘*q*’ | ‘8’]

**ROLling** [*n* | 3600 [‘*q*’ | ‘8’] ]

**SOUrce** [**CLDB** [**BOTH**] [2] | **ALDB** [2] ]

**STAtus** [**NO** | **YES**]

**XML**

**X740 —Direct Output (ALDB)**

(See X720)

**X760 —Day Type Analysis (CLDB)**

(See Y760)

**X770 —Day Type Analysis (ALDB)**

(See Y770)

**X810 —CLDB Key Generator**

Control File—TGX81A

Test Statements:

[label:] [test-clause] [true-clause] [false-clause]

Test Clause—

variable [relation] test value[ [relation] test value] . . .

True Clause—

**T** ( [**PRINT** *n*] [,**COUNT** *m*] [,*label* | ,**STOP** | ,**NEXT** | , continue] )

False Clause—

**F** ( [**PRINT** *n*] [,**COUNT** *m*] [,*label* | ,**STOP** | ,**NEXT** ] )

Format Statements—

n: {[*variable*[*field spec]*] [*literal*] [**BLANK**(*n*)] [**PAGE**] [**SKIP**(*n*)] [**TRIM** (*format-variable* | *literal*)]}

End Statement—

**END:** {[*variable*[*field spec*]] [*literal*] [**BLANK**(*n*)] [**PAGE**] [**SKIP**(*n*)] [**TRIM** (*format-variable* | *literal*)]}

Counter Variable—

**COUNT1—COUNT999**

Comment—

/*comment text*/

Substring—

**SUBSTRing** (*variable, start-position, length*)

Environment File—TGX81A (optional)

**CENtury** [**Yes** | **No**]

**PRInt** [**ECOnomize** | **FULl**]

**TIMe [STAndard | ISO8601]**

**TRAils**

**X820 —ALDB Key Generator**

(See X810)

**X910 —Scan, Archive/Delete**

Control File—TGX91A (optional)

*customer-id*, *channel*

Environment File—TGX91B

**ARChive** [**NORmal** | **FORCED**]

**RETain** [*mm/dd/yy*[*-hh:mm:ss*] | *n* | 1]

**SELect** [**KEY** | **ALL**]

**Q91C — Copy Cuts**

Control File—TGQ91CA

*customer-id*, *channel* [,*start-time*]

Environment File—TGQ91CB

**RePLace**

**REPort** [**EXCeptions** | **ALL**]

**KEYlist**

**ALL**

**Q91D — Delete Cuts**

Control File—TGQ91DA

*customer-id*, *channel* [,*start-time*]

Environment File—TGQ91DB

**RePLace**

**REPort** [**EXCeptions** | **ALL**]

**KEYlist**

**Q91M —Move Cuts**

Control File—TGQ91MA

*customer-id*, *channel* [,*start-time*]

Environment File—TGQ91MB

**RePLace**

**REPort** [**EXCeptions** | **ALL**]

**KEYlist**

| Procedure Name | Procedure Description |
|---|---|
| Y130 | Enhanced Direct Input (ELDB); See Oracle Utilities Load Analysis Load Data Management User's Guide |
| Y131 | Enhanced Production Input (ELDB) |
| Y220 | Manual Entry (ELDB) |
| Y230 | Billed Energy |
| Y240 | Load Data Extraction |
| Y310 | Standard Load Analysis |
| Y320 | Aggregate Load Analysis |
| Y330 | Ratio Analysis |
| Y340 | Coincident Peak Analysis (Analysis Bundle) |
| Y350 | Domains Analysis Mean Per Unit (Analysis Bundle) |
| Y360 | Domains Analysis Ratio (Analysis Bundle) |
| Y370 | Individual Customer Analysis (ELDB) (Analysis Bundle) |
| Y380 | 100% Sample Analysis |
| Y410 | Time Series Reporter |
| Y420 | Load Data Reporter (ELDB) |
| Y430 | Load Data Reporter (SLDB) |
| Y440 | ELDB Summary Reporter |
| Y450 | Totalizing Reporter (Reporting Bundle) |
| Y460 | SLDB Summary Reporter |
| Y490 | ELDB Cut Series Gap Reporter |
| Y491 | SLDB Cut Series Gap Reporter |
| Y530 | ELDB Cut Series Overlap Reporter |
| Y531 | SLDB Cut Series Overlap Reporter |
| Y620 | Load Data Transformation |
| Y630 | Load Data Editor (ELDB) |
| Y710 | Statistical Package Interface (ELDB) |
| Y720 | Direct Output (ELDB) |
| Y740 | Direct Output (SLDB) |
| Y760 | Day Type Analysis (ELDB) |
| Y770 | Day Type Analysis (SLDB) |
| Y780 | Statistic Extraction |
| Y810 | ELDB Key Generator |
| Y820 | SLDB Key Generator |
| Y910 | Archive/Delete |
| Y960 | SLDB Retrieval |

**Y130— Enhanced Direct Input (ELDB)**

Load Data File—TGX11E

First Header Record —

sort-code, customer-id, channel, start-time, stop-time, DST participant flag, invalid record flag

Second Header Record —

sort-code, meter-start-reading, meter-stop-reading, meter multiplier, meter offset, pulse multiplier, pulse offset, seconds per interval (SPI), LODESTAR unit of measure, basic unit code, time zones west of GMT, population, weight

Third Header Record —

sort-code, customer descriptor

Fourth Header Record —

sort-code, timestamp, origin

Data Record(s) —

sort-code, load data values, status code for each interval in cut, interval start time

Environment File —TGX11A

**ENHanced** [ **WRIte** | **NOWrite**]

**FULIintervals** [ **CODe** | **ADJ** ] [ **DESc** | **NODesc**]
**LOAd** [**REPlace**][**KEY**][**24Hradj**][**IDLength** *nn*]

**UOM** *From–UOM–code To–UOM–code*

**Y131— Enhanced Production Input (ELDB)**

*Information for Y131 is the same as for Y130, except that interval data input files must reside on the network server.*

**Y220— Manual Entry (ELDB)**

Control File—TGY22A

**NOTE:** Commands must be entered in the following order: KEY, SET, DATA, STATUS.

**KEY** *customer-id, channel, start-time*
**SET PULSE-MULT** [*pm* | 0]
**SET PULSE-OFFSET** [*po* | 0.0]
**SET UOM** [*ci* | 01]
**SET TIME-ZONE** [*tz* | -1]
**SET SECONDS-PER-INTERVAL** [*spi* | 900]
**SET POPULATION** [*pop* | 0]
**SET WEIGHT** [*wt* | 0]
**SET METER-MULT** [*mm* | 0]
**SET METER-OFFSET** [*mo* | 0.0]
**SET METER-START** [*mstart* | 0.0]
**SET METER-STOP** [*mstop* | 0.0]
**SET DES** [*descriptor*]
**SET DES1** [*descriptor1*]
**SET DES2** [*descriptor2*]
**DATa** *interval data*
**STAtus** *status codes*

**Y230— Billed Energy**

Control File—TGY23A

Individual Customer Control File records:

*Standard Analysis*

[ ± ] customer-id, channel-number [ { ± } chan1 [ { ± } chan2...] ], stratum-number

*Ratio or Coincident Peak Analysis*

[ ± ] customer-id, channel-number [ { ± } chan1 [ { ± } chan2...] ], stratum-number [, cycle-number]

*Domains Mean-per-unit Analysis*

[ ± ] customer-id, channel-number [ { ± } chan1 [ { ± } chan2...] ], stratum-number [,domain]

*Domains Ratio Analysis*

[ ± ] customer-id, channel-number [ { ± } chan1 [ { ± } chan2...] ], stratum-number, domain [,cycle-number]

*100% Sample Analysis*

[ ± ] customer-id, channel-number [ { ± } chan1 [ { ± } chan2...]

Block Control File records:

*Standard AnalysisType*

BLOck new-customer-id, new-channel-number, stratum-number

*Ratio/Coincident Peak Analysis Type*

BLOck new-customer-id, new-channel-number, stratum-number[, cycle-number]

[ ± ] customer-id, channel-number [ { ± } chan1 [ { ± } chan2...] ], stratum-number

*Domains Mean-per-unit Analysis Type*

BLOck new-customer-id, new-channel-number, stratum-number [, domain]

*Domains Ratio Analysis Type*

BLOck new-customer-id, new-channel-number, stratum-number, domain [, cycle-number ]

*100% Sample Analysis Type*

BLOck new-customer-id, new-channel-number

End Control File record

END

Environment File—TGY23B

**AGGregate** [300 | 900 | 1800 | 3600]

**DATe** *mm/dd/yy mm/dd/yy*

**LENgth** [*n* | 40]

**PROrate** [**YES** | **NO**]

**REPlace** [**YES** | **NO**]

**QUAlity** [‘*s*’ | ‘8’]

**TYPe** [**MPU** | 100% | **DMPu** | **DRAtio** | **RATio**] [**NOCalculate** | **CALculate**]

Cycle File—TGY23E

*cycle-number*, *start-date*, *stop-date*

**Y240— Load Data Extraction**

Control File—TGY24A

*customer-id*, *channel* [,*start-time* | ,*start-date*,*stop-date*]

Environment File—TGY24B

**AGGregate** [*n* | 3600]

**DATe** *start-date stop-date*

**DROp** *d*%

**PRInt** [**ECOnomize** | **FULl**]

**REPort** [**INComplete** | **ALL**][**TRIal**][**CSV**]

**SOUrce** [**ALDB** [2] | **CLDB** | **BOTH** [2] ]

**Y310— Standard Load Analysis**

Control File—TGY31A

*customer-id chan1* [{±}*chan2* [{±}*chan3*...[{±}*chann* ] ] ]
[*stratum-number* | 1]

Environment File - TGY31B

**AGGregate** [*n* | 3600]

**ALPha** [5% | 10%]

**ASSign** [**FIXed** [*comment* | **KWH**] | **FLOat** [**LF** | **KW** | **KWH**] ]

**BILling** [YES | NO]

**COMbined** total-population-billed-energy

**DATe** *start-date stop-date*

**DRO**p [*d*% | 100%]

**GRA**

**GROup** *title*

**KEY [*key* | STAR]**

**MINinum** [0 | **ZERo** | **NONZero**]

**PEA**k {*peak-time* | *custid channel*} *[descriptor]*

**PROrate** [**YES** | **NO**]

**QUA**lity [‘*q*’ | ‘8’]

**REPort** [**PRELiminary** | **NOStrata** | **NOEvaluation** | **COMplete]**
[**AVERage**][**PEAk**][**MINimum**][**CD**][**MCD**][**NCD**][**ENErgy**] [**FACtor**][**DAIly**][**ICS**][**ENTire**][**PREcision**][**STRatum**]

**ROLling** *n* [‘*q*’ | ‘8’]

**SCHedule** [*t* | 0]

**SEA**son [*s* | 0] [,**NOPrint** | ,**PRInt**]

**SKIp**

**STRata** [*stratum-number* | 1 [ *boundary* | **INFinity** [*population* | 0
[weight | 0-0] ] ] ]

**TOTalpopulation** *n*

**WRI**te [**NO** | **NOStrata** | **COMplete]**
[**AVERage**][**PEAk**][**MINimum**][**CD**][**MCD**][**NCD**][**ENErgy**]
[**FACtor**][**ENTire**]

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY31E

*season-sch# season# tou-sch# date-range* [*comment*]

User Specified Days File—TGY31F

date 1‘label1’‘label2’
date 2

- 
- 
- 

**Y320— Aggregate Load Analysis**

Control File—TGY32A

**KEY** *output-key*

**GROup** *title*

**GROup** *title*

**COMbine** *component-key1* [,*type*] [,*strata1* | ,0 [,*weight1* | ,0.0 [,*factor1* | ,1.0] ] ]

**COMbine** *component-key2* [,*type*] [,*strata2* | ,0 [,*weight2* | ,0.0 [,*factor2* | ,1.0] ] ]

**COMbine** *component-keyN* [,*type*] [,*strataN* | ,0 [,*weightN* | ,0.0 [,*factorN* | ,1.0] ] ]

**100%**—*component-key N+1* [,*factorN+1* | 1.0]

**END**

Environment File—TGY32B

**ALPha[5% | 10%]**

**DATe** *start-date*

**PEA**k {*peak-time* | *custid channel*} *[descriptor]*

**REPort** [**NOEvaluation** | **COMplete**] [**ENTire**][**AVErage**][**PEAk**][**MINimum**][**NCD**][**ENErgy**] [**FACtor**]

**SCHedule** [*t* | 0]

**SEA**son [*s* | 0] [**NOPrint** | **PRInt**]

**WRI**te [**NO** | **COMplete**][**ENTire**][**AVErage**][**PEAk**][**MINimum**][**NCD**][**ENErgy**][**FACtor**]

**Y330— Ratio Analysis**

Control File—TGY33A

*customer-id chan1* [{±}*chan2* [{±}*chan3*...[{±}*chann* ] ] ]
[*stratum-number* | 1] [*billed-energy*]

Environment File—TGY33B

**AGGregate** [*n* | 3600]

**ALPha** [5% | 10%]

**ASSign** [**FIXed** [*comment* | **KWH**] | **FLOat** [**LF** | **KW** | **KWH**] ]

**BILling** [**YES** | **NO**]

**DATe** *start-date stop-date*

**DROp** [*d*% | 100%]

**COMbined** *total-population-billed-energy*

**GRA**

**GROup** *title*

**KEY [*key* | STAR]**

**MINinum** [0 | **ZERo** | **NONZero**]

**PEA**k {*peak-time* | *custid channel*} *[descriptor]*

**PROrate** [**YES** | **NO**]

**QUA**lity [‘*q*’ | ‘8’]

**REPort** [**PRELiminary** | **NOStrata** | **NOEvaluation** | **COMplete**]
[**CMB**][**AVERage**][**PEAk**][**MINimum**] [**CD**] [**MCD**] [**NCD**]
[**ENErgy**] [**BILl**][**FACtor**][**DAIly**][**ICS**][**ENTire**][**PREcision**]

**ROLling** *n* [‘*q*’ | ‘8’]

**SCHedule** [*t* | 0]

**SEA**son [*s* | 0] [,**NOPrint** | ,**PRInt**]

**SKIp**

**STRata** [*stratum-number* | 1 [ *strata-billed-energy* [*boundary* | **INFinity**
[*population* | 0 [weight | 0-0] ] ] ] ]

**TOTalpopulation** *n*

**WRI**te [**NO** | **NOStrata** | **COMplete**]
[**AVERage**][**PEAk**][**MINimum**][**CD**][**MCD**][**NCD**][**ENErgy**]
[**FACtor**][**ENTire**]

Holiday File—TGY33C

*mm/dd/yy*

Time-of-Use Schedule File—TGY33A

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY33E

*season-sch# season# tou-sch# date-range* [*comment*]

User Specified Days File—TGY33F

date 1‘label1’‘label2’
date 2

- 
- 

**Y340— Coincident Peak Analysis (Analysis Bundle)**

Control File—TGY34A

*customer-id chan1* [{±}*chan2* [{±}*chan3*...[{±}*chann* ] ] ]
[*stratum-number*] [*customer-billed-energy*][*period-number*]

Environment File—TGY34B

**BREakpoints** *brkpt1 brkpt2... brkptN*

**BILling** [**NO** | **YES**]

**DATe** *start-date stop-date*

**DROp** [*d*% | 100%]

**GROup** *title of customer class*

**PEAk1** *peak-time*, [*population billed energy*] [*d*%] [*w#*]

**PEAk2** *peak-time*, [*population billed energy*] [*d*%] [*w#*]

...

**PEAkn** *peak-time*, [*population billed energy*] [*d*%] [*w#*]

**PERiod** *title of analysis period*

**QUAlity** ['*q*' | '8']

**REPort** [**NOStrata** | **NOVarcov** | **COMplete**]

**SOU**rce [**BOTH** | **ELDB** | **ALDB**]

**STRata** *Strata-number peak-period-number* [*bound* | **INF** [*population* | 0 [*weight* | 0.0] ] ]

**TYPe** [**MPU** | **RATio** | **BOTh**]

**Y350— Domains Analysis Mean Per Unit (Analysis Bundle)**

Control File—TGY35A

*customer-id chan1* [{±}chan2 [{±}chan3...[{±}chan*n* ] ] ]
*strata-number domain*

Environment File—TGY35B

**AGGregate** [*n* | 3600]
**ALPha** [5% | n%]
**ASSign** [**FIXed** [*comment* | **KWH**] ]
**BILling [YES | NO]**
**CLAss**
**COMbined** [population-billed-energy]
**DATe** *start-date stop-date*
**DOMain** *n* [*title*]
**DROp** [*d*% | 100%]
**ENErgy domain-number** [domain billed energy | 0] [domain population]
**GRA**
**GROup** *title*
**KEY [*key* | STAR]**
**MINinum** [0 | **ZERo** | **NONZero**]
**PEAk** *peak-time*
**POPulation** *stratum-number domain-number domain-population-in-stratum*
**PROrate** [**YES** | **NO**]
**QUAlity** [‘*q*’ | ‘8’]
**REPort** [**PREliminary** | **NOStrata** | **NOEvaluation** | **COMplete**]
[**AVErage**][**PEAk**][**MINimum**][**CD**][**MCD**]
([**NCD**][**ENErgy**]) [**FACtor**][**DAIly**][**ICS**][**ENTire**]
[**PREcision**][**STRatum**]
**ROLling** *n* [‘*q*’ | ‘8’]
**SCHedule** [*t* | 0]
**SEA**son [*s* | 0] [,**NOPrint** | ,**PRInt**]
**STRata** [*stratum-number* | 1 [*boundary* | **INFinity** [*population* | 0
[weight | 0-0] ] ] ]
**TOTalpopulation** *n*
**WRI**te [**NO** | **NOStrata** | **COMplete**]
[**AVErage**][**PEAk**][**MINimum**][**CD**][**MCD**][**NCD**][**ENErgy**]
[**FACtor**][**ENTire**]

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY31E

*season-sch# season# tou-sch# date-range* [*comment*]

User Specified Days File—TGY31F

date 1 ‘label1’ ‘label2’
date 2

**Y360— Domains Analysis Ratio (Analysis Bundle)**

Control File—TGY36A

*customer-id chan1* [{±}*chan2* [{±}*chan3*...[{±}*chann* ] ] ]
*stratum-number* [*domain*][*customer-billed-energy*]

Environment File—TGY36B

**AGGregate** [*n* | 3600]

**ALPha** [5% | n%]

**ASSign** [**FIXed** [*comment* | **KWH**] ]

**BILling** [**YES** | **NO**]

**CLAss**

**COMbined** [*population-billed-energy*]

**DATe** *start-date stop-date*

**DOMain** *n* [*title*]

**DROp** [*d*% | 100%]

**ENErgy** *n* [*domain billed energy* | 0] [*domain population*]

**GRA**

**GRO**up *title*

**KEY [*key* | STAR]**

**MINinum** [0 | **ZERo** | **NONZero**]

**PEA**k *peak-time*

**POPulation** *stratum-number domain-number domain-population-in-stratum*

**PROrate** [**YES** | **NO**]

**QUAlity** [‘*q*’ | ‘8’]

**REPort** [**PREliminary** | **NOEvaluation** | **COMplete**]
[**AVErage**][**PEAk**][**MINimum**][**CD**][**MCD**]
[**NCD**][**ENErgy**][**FACtor**][**DAIly**][**ICS**][**ENTire**]
[**PREcision**]

**ROLling** *n* [‘*q*’ | ‘8’]

**SCHedule** [*t* | 0]

**SEA**son [*s* | 0] [,**NOPrint** | ,**PRInt**]

**STRata** [*stratum-number* | 1 [ *strata-billed-energy* [*boundary* | **INFinity**
[*population* | 0 [weight | 0-0] ] ] ] ]

**TOTalpopulation** *n*

**WRI**te [**NO** | **COMplete** [**AVErage**][**PEAk**]
[**MINimum**][**CD**][**MCD**][**NCD**][**ENErgy**]
[**FACtor**][**ENTire**] ]

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY31E

*season-sch# season# tou-sch# date-range* [*comment*]

User Specified Days File—TGY31F

date 1 ‘label1’ ‘label2’
date 2

- 
- 
- 

**Y370— Individual Customer Analysis (ELDB) (Analysis Bundle)**

Control File—TGY37A

*customer-id chan1* [{±}*chan2* [{±}*chan3*...[{±}*chann* ] ] ]
[*start-time* | *billing-cycle*] [**SCHedule** [**DEMand** | *t* | 0] | **SEAson** [*s* | 0] ]
[/**comment*]

Environment File—TGY37B

**24H** [**YES** | **NO**]

**AGGregate** [*n* | 0]

**AVGreport** [*Avg1* [,*Avg2* [,*Avg3* ....[,*Avg8*] ] ] | **NO** | **COMplete**]

**DATe** [**CUT** | *start-time stop-time* [**MONthly** [**SUMmary**] ] ]

**GROup** *title*

**MERge** [**YES** | **NO**]

**PAGinate** [**NO** | **YES**]

**PEAk** *peak-time*

**PROrate** [**YES** | **NO**]

**QUAlity** [‘*q*’ | ‘8’]

**ROLling** *n* [‘*q*’ | ‘8’]

**SCHedule** [**DEMand** | *t* | 0]

**SEAson** [*s* | 0]

**SKIp**

**TOUreport** [**NO** | **YES**]

**WRIte** [**TOU** | **AVErage** | **NO** | **COMplete**] [**SEParate**]* [**HEA**der]
* **SEP** option is not valid when **NO** is specified.

Demand Period File—TGY37E

**PERiod** *n* [*description*]

*date start-time1 stop-time1 start-timex stop-timex...*

**END** *description*

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY31E

*season-sch# season# tou-sch# season start-time season stop-time season-name*

Billing cycle File—TGY23E

*cycle# start-time stop-time*

**Y380— 100% Sample Analysis**

Control File—TGY38A

*customer-id chan1* [{±}*chan2* [{±}*chan3*...[{±}*chann* ] ] ]

Environment File—TGY38B

**AGGregate** [*n* | 3600]

**DATe** *start-date stop-date*

**GRA**

**GROup** *title*

**KEY [***key* **| STAR]**

**MINinum** [0 | **ZERo** | **NONZero**]

**PEA**k {*peak-time* | *custid channel*} *[descriptor]*

**REPort** [**PREliminary** | **NOEvaluation** | **NOStrata** | **COMplete**]
[**AVErage**][**PEAk**][**MINimum**][**CD**][**MCD**]
[**NCD**][**ENErgy**][**FACtor**][**DAIly**][**ICS**][**ENTire**]

**ROLling** *n*

**SCHedule** [*t* | 0]

**SEA**son [*s* | 0]

**SKIp**

**STRata** *stratum-number* [*comment*]

**WRI**te [**NO** | **NOStrata** | **COMplete**] [**AVErage**][**PEAk**]
[**MINimum**][**CD**][**MCD**][**NCD**][**ENErgy**]
[**FACtor**][**ENTire**]

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule File—TGY31E

*season-sch# season# tou-sch# date-range* [*comment*]

User Specified Days File—TGY31F

date 1 'label1' 'label2'
date 2

- 
- 
- 

**Y410 Time Series Reporter**

Control File—TGY41A

**REPort** *report-name*

**TL** *n* [*title-line* | **NULL** | **BLANK**]

**KEY** *customer-id*, *channel* [,*start-date*] [,**SUM** | ,**NOSum**] [,**PEAk** | ,**NOPeak**] [,**CLAss**] [,**DEC**(*n*) | ,**DEC(2)**] [**CH1** '*head1*'] [**CH2** '*head2*']

Environment File—TGY41B

**DATe** *start-date stop-date*

**AGGregate** [*n* | 0]

**FILe** [ **NO** | **YES** [**BLOCK** | **NOBlock**] [**HEAder**] ]

**Y420— Load Data Reporter (ELDB)**

Control File —TGX41A

*customer-id*, *channel* [,*start-time*] [,**ENErgy**] [,**DEMand**]
[**SCHedule** [*n* | 0 ] ] [,**AGGregate** [*n* | 0] ]
[,**ROLling** [*n* | 3600 [‘*q*’ | ‘8’] ] ]
[,**PEAk**][,**MINimum**][,**DAIly**][,**SUMmary**]

Environment File—TGX41B

**ACTive**
*** AGGregate** [n | 0]
**DAIly**
**DATe** [*start-time*] [*stop-time*]
**DEMand** [**SPReadsheet** | **NOSpreadsheet**] [**NOReport** | **REPort**]
**ENErgy** [**SPReadsheet** | **NOSpreadsheet**] [**NOReport** | **REPort**]
**INActive**
**MINimum**
**NUMber** [10 | 50]
**ORIginal**
**PEAk** [*n* | 10]
*** ROLling** [*n* | 3600] [‘*q*’ | ‘8’]
*** SUBset** [**YES** | **NO**]
**SCHedule** [*t* | 0 ]
**SEAson** [*s* | 0 [,**PRInt** | ,**NOPrint**] ]
**SEParate** [**PEAk**] [,**MINimum**]
**SOUrce** [**ELDB** [**BOTH** ][2] ]
**SUMmary**
**XML**
*** Use for customer load data records only.**

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

Season Schedule—TGY31E

s*eason-sch# season# tou-sch# date-range* [*season name*]

**Y430— Load Data Reporter (SLDB)** (See Y420)

**SOUrce** [**SLDB** [2] ]

**Y440— ELDB Summary Reporter**

Control File—TGY44A

*customer-id*, *channel*

Environment File—TGY44B

**DATe** [*start-time stop-time* | **ALL**]

**SELect** [**KEY** | **ALL**]

**SOUrce ELDB**

**Y450— Totalizing Reporter (Optional Extension)**

Control File—TGX43A

**ACCumulate** [*subtitle*]
**AGGregate** [*n* | 3600]
**BLOck** [*block title*]
**DATe** *start-time stop-time* [**PAGe**]
**REMark** [‘*remark*’]
**SCH**edule [*n* | 0
**TL** *n* [*title* | **BLANK** | **NULL**]
**KEY** *customer-id channel* [**SUB** | **ADD**] [**MULT** [*nm* | 1.0] ] [‘*remark*’]
**KEY**...

- 
- 
- 

**END** ‘*label*’ [*customer-id channel*] [**SKIp** *n* | **PAGe**]

Environment File—TGX43B

**HIGhest** [*n* | 3 [**AVErage** | **AVG**] [**CPK**] ]
**QUAlity** [‘*q*’ | ‘8’]
**REPort** [**SUMMARY** | **NONE** | **ALL**]
**SAVe** [**REPlace**] [**ARChive**]
**STAtus** [**YES** | **ALL** | **NO**]
**STOp** [**NO** | **YES**]
**UOMcheck** [**NO** | **YES**] | [**OFF** | **ON**]
**VALid** [**NO** | **YES**]
**XML**

Holiday File—TGX43C

*mm/dd/yy*

Time-of-Use Schedule File—TGX43D

*sch# period day-list time-range* [*comment*]

**Y460— SLDB Summary Reporter** (See Y440)

**SOUrce** { **SLDB** }

**Y490— ELDB Cut Series Gap Reporter**

Control File—TGX49A (optional)

*customer-id*, *channel*

Environment File—TGX49B (optional)

**DATe** [*start-time stop-time* | **ALL**]

**SELect** [**KEY** | **ALL**]

**PRInt** [**GAP** | **ALL**]

**SOUrce** {**ELDB**} [**STAtistics**]

**QUAlity** [‘*q*’ | ‘8’]

**TITle** *optional-user-title*

**Y491— SLDB Cut Series Gap Reporter** (See Y490)

**SOUrce** {**SLDB**} [**STAtistics**]

**Y530— ELDB Cut Series Overlap Reporter**

Control File—TGX53A (optional)

*customer-id*, *channel*

Environment File—TGX53B (optional)

**DATe** [*start-time stop-time* | **ALL**]

**SELect** [**KEY** | **ALL**]

**PRInt** [**OVErlaps** | **ALL**]

**SOUrce** {**ELDB**} [**STAtistics**]

**TITle** *optional-user-title*

**Y531— SLDB Cut Series Overlap Reporter** (See Y530)

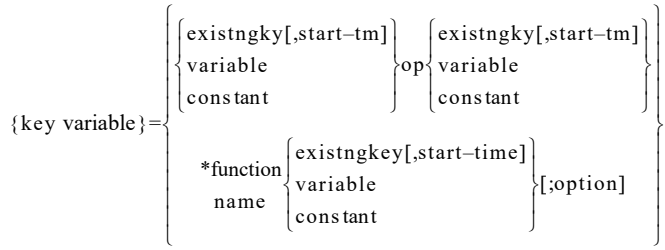
**SOUrce** {**SLDB**} [**STAtistics**]

**Y620— Load Data Transformation (ELDB)**

Control File—TGY62A

**BLO**ck

**BDA**te [*block-start-time*] [*block-stop-time*]




*See Transformation Functions, next page.

Environment File—TGY62B

**AGGregate** [*n* | 3600]

**DATe** *start-time stop-time*

**MERge** [**YES** | **NO** | **EXClude**]

**QUAlity** [‘*q*’ | ‘8’]

**STOP [NO [IGNore] | YES]**

**TRIal**

**UOM** *default UOM code*

**GRAph**

**XML**

Holiday File—TGY31C

*mm/dd/yy*

Time-of-Use Schedule File—TGY31D

*sch# period day-list time-range* [*comment*]

**Transformation Functions** (**Note:** There must be one blank preceding each equal sign (=) and one blank following the equal sign.)

**Function Format**

**CLA**ss $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **CLA**ss (sample-level analysis-statistic)

**DES** $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **DES**(descriptor)

**DUR**ation $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **DUR**ation$\left(\left\{\begin{array}{l}\text{exstngkey[,start]}\\\text{variable}\\\text{constant}\end{array}\right\}\right)$

**KVA** $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **KVA**$\left(\left\{\begin{array}{l}\text{key[,start]}\\\text{variable}\end{array}\right\}\left\{\begin{array}{l}\text{;key[,start]}\\\text{;variable}\end{array}\right\}\right)$

**KVAR** $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **KVAR**$\left(\left\{\begin{array}{l}\text{key[,start]}\\\text{variable}\end{array}\right\}\left\{\begin{array}{l}\text{;key[,start]}\\\text{;variable}\end{array}\right\}\right)$

**MAS**k $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **MAS**k$\left(\left\{\begin{array}{l}\text{exstngkey[,start]}\\\text{variable}\\\text{constant}\end{array}\right\}\left[\begin{array}{l}\text{;comp}\\\text{;=}\end{array}\right]\left[\begin{array}{l}\text{;value}\\\text{;status}\end{array}\right]\left[\begin{array}{l}\text{;alt. status}\\\text{; '9 '}\end{array}\right]\right)$

**PER**cent $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **PER**cent$\left(\left\{\begin{array}{l}\text{exstngkey[,start]}\\\text{variable}\end{array}\right\}\right)$

**PWF (Power Factor)** $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **PWF**$\left(\left\{\begin{array}{l}\text{key[,start]}\\\text{variable}\end{array}\right\}\left\{\begin{array}{l}\text{;key[,start]}\\\text{;variable}\end{array}\right\}\right)$

**ROL**ling $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **ROL**ling$\left\{\begin{array}{l}\text{exstngkey[,start]}\\\text{variable}\end{array}\right\}\left[\begin{array}{l}\text{;spi}\\\text{;3600}\end{array}\right]$

**SQR**t $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = **SQR**t$\left(\left\{\begin{array}{l}\text{key}\\\text{variable}\\\text{constant}\end{array}\right\}\right)$

**TOD** $\begin{Bmatrix}\text{key}\\\text{variable}\end{Bmatrix}$ = $\left\{\begin{array}{l}\textbf{WKD}\\\textbf{WKN}\\\textbf{WDX}\\\textbf{WNX}\\\textbf{WDH}\\\textbf{WNH}\\\textbf{SUN}\\\textbf{MON}\\\textbf{TUE}\\\textbf{WED}\\\textbf{THU}\\\textbf{FRI}\\\textbf{SAT}\end{array}\right\}\left(\left\{\begin{array}{l}\text{exstngkey[,start]}\\\text{variable}\\\text{constant}\end{array}\right\}\left[\begin{array}{l}\text{;status}\\\text{; '  '}\end{array}\right]\right)$

**TOU** $\left\{\begin{matrix}\text{key}\\\text{variable}\end{matrix}\right\}$ = **TOU**$\left(\left\{\begin{matrix}\text{key}\\\text{variable}\\\text{constant}\end{matrix}\right\}\left[\begin{matrix};\text{sch\#}\\;\underline{\text{'1'}}\end{matrix}\right]\left[\begin{matrix};\text{tou}\\;\underline{\text{'1'}}\end{matrix}\right]\left[\begin{matrix};\text{status}\\;\underline{\text{' '}}\end{matrix}\right]\left[\begin{matrix};\text{alt. status}\\;\underline{\text{' 9 '}}\end{matrix}\right]\right)$

**UOM** $\left\{\begin{matrix}\text{key}\\\text{variable}\end{matrix}\right\}$ = **UOM** (two-digit unit-of-measure code)

**Y630— Load Data Editor (ELDB)** (See X310)

**Y710— Statistical Package Interface (ELDB)**

Control File—TGY71A

*customer-id*, *channel* [,*start-time*] [,**CLAss**]

Environment File—TGY71B

**AGGregate** [*n* | 3600]

**DAT**e *start-time stop-time*

**MERge** [**YES** | **NO**]

**QUAlity** [‘*q*’ | ‘8’]

**SOUrce** {**ELDB**}

**Y720— Direct Output (ELDB)**

Control File—TGY72A

*customer-id*, *channel* [,*start-time*][,**INActive** | ,**ACTive**] [,**CLAss**]

Environment File — TGY72B

**24Hradj** [**YES** | **NO**]
**AGGregate** [*n* | 0]
**CDAt** *start-date stop-date*
**CSV**
**DAIly** [**SENdout** [*h* | 0] ] [**FOR** [*x.y* | 7.3]] [**HEAder**]
**DATe** *start-date stop-date*
**INP**
**LSE**
**MERge** [**YES** | **NO** | **EXClude**]
**ONErecord**
**QUAlity** [‘*q*’ | ‘8’]
**SOUrce** {**ELDB** | **SLDB**}[**BOTH**][2]
**STAtus** [**NO** | **YES**]
**XML**
**GRAph**

**Y740— Direct Output (SLDB)** (See Y720)

**Y760— Day Type Analysis (ELDB)**

Control File — TGY76A

*customer-id*, *channel*, [ *optional 88-character title* ]

Environment File — TGY76B

**DATe** [*start-date*] [*stop-date*]
**QUAlity** [‘*q*’ | ‘8’]
**REPort** [**WD** | **WN** | **PK** | **NP** | **NONe** | **ALL**]
**SOUrce** {**CLDB** [**BOTH**] [2] | **ALDB** [2] | **ELDB** [**BOTH**] [2] | **SLDB** [2]}
**SEAson** *n*
**TL1** [*optional 80-character title*]
**TL2** [*optional 80-character title*]
**MERge** [**YES** | **NO** | **EXClude**]
**TYPe** [**WD** | **WN** | **PK** | **NP** | **NONe** | **ALL**]

Peak Days File—TGY76C

*mm/dd/yy date designation*

Holiday File—TGY31C

*mm/dd/yy*

Season File—TGY31E

*Season-sch# season# tou-sch# date-range* [*comment*]

**Y770— Day Type Analysis (SLDB)**

(See Y760)

**Y780— Statistic Extraction (CLDB, ALDB, ELDB, or SLDB)**

Control File

*statistic-id stratum* [label] [period] [totalize-method] [PKDate] [CLAss] [time-of-use]

Environment File

**TTL** *title*

**CLAss**

**DECimal** *digits*

**PERiod** *period type*

**TOTalize** *totalize method*

**ROW** *value, label*

**COL** *value, label*

**AGGregate** *spi*

**DATe** *start-time Label*

**ZERoes**

**DELimiter** *period type*

**24Hadjust** *YES | NO*

**SCHedule** schedule#-period#

**SEAson** *season#-period#*

**Y810— ELDB Key Generator** (See X810)

**Y820— SLDB Key Generator** (See X810)

**Y910— Archive/Delete**

Control File — TGY91A (see Key Generator X810)

*customer-id*, *channel*, *start-time*

Environment File — TGX92B

**PRInt** [**ECOnomize** | **FULl**]

**REPort** [**EXCeptions** | **ALL**]

**SOUrce** {**CLDB**}

**Y960— SLDB Retrieval**

Control File — TGY96A

*customer-id*, *channel*, *start-time*

Environment File—TGY96B

**DATe** [*start-time stop-time* | **ALL**]

**FLAgs** [**NOReset** | **RESet**]

**SELect** [**ALL** | **KEY**]

| Procedure Name | Procedure Description |
|---|---|
| | **Sampling Programs—Sampling Bundle** |
| B110 | Record Definition |
| B210 | Single Dimensional Population Analysis |
| B220 | Multi-Dimensional Population Analysis |
| B310 | Single Dimensional Sample Design |
| B320 | Multi-Dimensional Sample Design |
| B410 | Single Dimensional Sample Selection |
| B420 | Multi-Dimensional Sample Selection |
| B520 | Sample Validation |
| B960 | Population Data File Conversion |
| | |
| | **Cost of Service Interface Programs—Analysis Bundle** |
| G110 | COSI Direct Input (GLDB) |
| Z120 | COSI SLDB/ELDB Data Extraction |
| G130 | COSI Energy Allocators |
| G210 | COSI Allocate Sampling Error |
| G250 | COSI Allocate T&D Losses |
| G310 | COSI GLDB Data Editor |
| G410 | COSI Rates Reporter |
| G430 | COSI GLDB Time Series Reporter |
| G440 | COSI GLDB Summary Reporter |
| G450 | COSI RLDB Summary Reporter |
| G610 | COSI Cost Allocators |
| G710 | COSI Statistics Output |
| G720 | COSI Direct Output |
| G810 | COSI GLDB Key Generator |

**B110 — Record Definition**

Control File—TGB12A

Field Definition Statements—

*variable name* *datatype* **HIST** *comment*

Adjustment Statements—

**ADJUST {+d | -d}** *comment*

Population Data File (SCDB)

(Refer to *Oracle Utilities Sampling Package User's Guide*)

**B210 — Single Dimensional Population Analysis**

Population Data File (SCDB) (See B110)

Record Definition File—TGB22C

(use TGB121)

Control File—TGB22A

Comments—

/**comment*/

Test statements—

selection-variable = test-value

usage variable # 0.0 F (**COUNT**1)

usage-variable > $x_2$.0 F (**COUNT**2)

usage-variable > $x_3$.0 F (**COUNT**3)

....

usage-variable > $x_n$.0 F (**COUNT**N) **T** (**COUNT**n+1)

Formats:

End:

Format statements—

' $x_n$.0' **COUNT**n **SKIP**(1)

Sampling Parameter File

(Refer to *Oracle Utilities Sampling Package User's Guide*)

**B220 — Multi-Dimensional Population Analysis**

Population Data File (SCDB) (See B110)

Record Definition File—TGB22C
(use TGB121)

Control File—TGB22A (See B210)

Also include:

Dim statement—

$Dim_n$ $a_1$, $a_2$, …$a_n$ b value

Dimensions based on usage variables—

usage variable > strata lower bound **T(COUNT** $99_{\mathbf{n}}$**) F** (label)

Dimensions based on demographic or categorical variables——

demographic value = 'value' **T(COUNT**$99_{\mathbf{n}}$**,** label for next series)
**F(COUNT**$99_{\mathbf{n}}$**,** label for next statement)

Sampling Parameter File
(Refer to *Oracle Utilities Sampling Package User's Guide*)

**B310— Single Dimensional Sample Design**

Frequency Distribution File (created by B210 program)

Environment File—TGB31B

**DESign** {**FIXed** *sample-size* | **OPTimal** *precision level-of-confidence* | **OPTimal COEfficient** *coefficient-of-variation*} [min]

**END** [*breakpoint* [*sigma* | 100%] ]

**HD1** [*title*]

**HD2** [*title*]

**LENgth** [*l* | 0]

**MEAN** [*demand*]

**STRata** [**FIXed** | *m n* | 0 7]

**B320— Multi-Dimensional Sample Design**

Population Statistics File—TGB32A

(Use Population Statistics File (.PSF) from B220)

Environment File—TGB32B

**DESign** {**FIXed** *sample-size* | **OPTimal** *precision level-of-confidence* | **OPTimal COEfficient** *coefficient-of-variation*} [*min*]

**HD1** [*title*]

**HD2** [*title*]

**B410 —Single Dimensional Sample Selection**

Population Data File—(SCDB)

(See B110)

Record Definition File—TGB22C

(Use TGB121)

Control File—TGB22A

Comments—

/*comment */

Test statements—

Selection-variable = test-value

usage-variable > stratum-lower-bound$_{1\ldots n}$ **T(COUNT**$_{991}$**)F(CELL)**

Dim1 n b usage-variable

File Statements—

**Y**$_{1\ldots n:}$ **STRATA** = **Y**$_{1\ldots n}$ **RAN#** = **RANDOM** (a,b)

Reporting Control File—TGB22A.RCF

(refer to *Oracle Utilities Sampling Package User's Guide*)

**B420— Multi-Dimensional Sample Selection**

Population Data File—(SCDB)

(use version created by Multi-Dimensional Population Analysis)

Record Definition File— TGB22C

(use TGB121)

Control File—TGB22A

Comments—

/* comment */

Test statements—

**STRATA** > n **F**(**WRITE**n)

Formats:

File:

n: **RAN#** = **RANDOM** (a,b)

Reporting Control File—TGB22A.RCF

(refer to *Oracle Utilities Sampling Package User's Guide*)

**B520— Sample Validation**

Relative Accuracy File—TGB52B

**ALPha** [5.00 | 10.00]

**GROup** *title*

Sample Statistics File—*.SSF

(Use *.SSF file from B410 for single dimensional design or B420 for multi-dimensional design)

Population Statistics File—*.PSF

(Use *.PSF file from B410 for a single dimensional design; or *.PSF file from from B220 for a multi-dimensional design)

**B960— Population Data File Conversion**

Population Data File (SCDB or *.PDF)

Record Definition File

(Use TB121 or *.RDF created in B110)

Sampling Parameter File (*.SPF)

(created/edited by administrator only)

**G110 —COSI Direct Input (GLDB)**

Load Data File—TGG11E

First Header Record Format (required)

Sort Code, customer identifier, channel, start-time, stop-time intervals per hour, unit of measure, alternate format, filler

Second Header Record Format (optional)

Sort Code, filler, pulse multiplier, filler, pulse offset

Third Header Record Format (optional)

SortCode, descriptor, alternate pulse multiplier, population, filler

Fourth Header Record Format (optional)

SortCode, descriptor, filler

Load Data Record Format (required)

SortCode, data values, final filler

Environment File—TGG11B

**LOAd** [**REPlace**] [**KEY**] [**ADJust**] [**DST** [**VAR**] ] [**ASIs** [**IPH**] ]

**Z120 —COSI SLDB/ELDB Data Extraction**

Control File—TGZ12A

For extracting customer loads—

*customer-id*, *channel*, **ASIs**

For extracting statistics—

*statistics-id-prefix* [,**ERRor** | ,**NOError**] [,**COMbined** | ,**RATio** | ,**SEPa-rate** | ,100 | ,**STAndard**] [,**DOMains**]

Environment File—TGZ12B

**AGG** [n | 3600]

**ASIs** [*iph*]

**CDAte** new-start-date new-stop-date

**DATe** *start-date stop-date*

**ERRor**

**SOUrce** [**SLDB** | **ELDB** | **BOTH**]

**G130 —COSI Energy Allocators**

Control File—TGG13A

- For Street Lighting Allocation

{**KEY** *rate-class-prefix1* [, *descriptor1*]
**KEY** *rate-class-prefix2* [, *descriptor2*]
...
**KEY** *rate-class-prefixN* [, *descriptorN*] }
**LITe**
**POPulation** *value1*, *value2* … *valueN*
**ENErgy** *uom value1*, *value2* … *valueN*
**SUN**
*sunrise hour1*, *sunset hour1*, *sunrise hour2*, *sunset hour2* …
*sunrise hour N*, *sunset hour N*
**END**

- For Allocation Based on Existing Load Shapes

**KEY** *rate-class-prefix* [,*descriptor*]
**LOAd**
**POPulation** *value*
**SHApe1** *customer-id*, *channel* [,*factor1*]
**SHApe2** *customer-id*, *channel* [,*factor2*]
...
**SHApeN** *customer-id*, *channel* [,*factorN*]
**MONthly** *uom energy-value*
**END**

- For Even Allocation

**KEY** *rate-class-prefix* [,*descriptor*]
**EVEn**
**POPulation** *value*
**DAIly** *uom*
*value1*, *value2*,...*valueN*
**END**

(Continued Next Page)

**G130 —COSI Energy Allocators** (Continued)

- For Allocation Over Workdays

**KEY** *rate-class-prefix1* [,*descriptor1*]
**WORk**
**POPulation** *value*
**TIMe** *start-time end-time*
**ENErgy** *uom energy-value*
**END**

- For Additive Allocation

**KEY** *rate-class-prefix1* [,*descriptor1*]
**ADD**
**POPulation** *value*
{**SHApe1** *customer-id*, *channel* [,*factor1*][**SUBtract** | **ADD**]
**SHApe2** *customer-id*, *channel* [,*factor2*][**SUBtract** | **ADD**]
...
**SHApeN** *customer-id*, *channel* [,*factorN*][**SUBtract** | **ADD**] }
**END**

- For Multiplication

**MUL** *custid*, *channel* [*start-time*]
{**WRIte** *rate-class-prefix1 ,constant* [, *descriptor*]
**WRIte** *rate-class-prefix2 ,constant* [, *descriptor*]
...
**WRIte** *rate-class-prefixN ,constant* [, *descriptor*] }
**END**

Environment File—TGG13B

**DATe** *start-date stop-date*
**REPlace**

**G210— COSI Allocate Sampling Error**

Environment File—TGG21B

**DATe** *start-date stop-date*

**DIScrepancy** *rate-class-prefix*

**LOSs** v*oltage-level-prefix* {**CUT** *recorderid channel* [*fixed-loss*] | *variable-loss* [*fixed-loss*] [**LOAd** *peak-load*] }

***PEAk*** *peak-time*

**REPlace**

**SCHedule** [n | 0]

**TITle** *text*

{**VARiable** | **FIXed-variable** [**ENVironment** | **RATe**]}

{**PROportional** | **STAndard** | **ADD** *rate-class-prefix*}

**VERsion** [n | 0]

**WRI**te [**INItial** | **PREmise** | **NONe** | **ALL**]
[**AVE**][**CD**][**ENE**][**MAX**][**MCD**][**MIN**]

Rate File—TGG21C

Report Format Commands

[**MW** | **KW**]

**DECimal** [n | 0]

Rate Class/Sub-Class Group Record Format

*Rate-class-prefix*, *descriptor1*, *descriptor2*, *descriptor3*, *allocate error flag*, *weight factor*, *fixed loss amount*, *voltage level prefix*, *folding flag*

Group Sub-Total Format—

*Sub*, *class-prefix*, *descriptor1*, *descriptor2*, *descriptor3*, *rate-class-prefix1*, … *rate-class-prefixN* [,**NOStatistics**]

System Record Format—

**SYSTEM**, *rate-class-prefix*, *descriptor1*, *descriptor2*, *descriptor3*, *allocate error flag*, *weight factor*, *fixed loss amount*, *voltage level prefix*, *folding flag*

Loss and Error Record Format

**LOSS**, *group*, *description1*, *descriptor2*, *descriptor3*

**ERROR**, *descriptor1*, *descriptor2*, *descriptor3*

Time-of-Use File—TGE31D (See Y310)

Holiday File—TGE31C (See Y310)

**G250— COSI Allocate T&D Losses**

Environment File—TGG25B

**DATe** *start-date stop-date*

**DIScrepancy** *rate-class-prefix*

**FOLd** *rate-class-prefix*, *rate-class-prefix1*, … *rate-class-prefixN*

**LOSs** *voltage-level-prefix fixed-loss*

**PEAk** *peak-time*

**REPlace**

**SCHedule** [n | 0]

**TIT**le

{**VARiable** | **FIXed-variable** [**RATe** | **ENVironment**] [**CD** | **NCD** | **SCD**]}

**VERsion** [*n* | 0 | **INPut** [*n* | 0] | **OUTput** [*n* | 0] ]

**WRIte** [**GNR1** | **NGNR2** | **NONe** | **ALL**] [**AVE**] [**CD**] [**ENE**] [**MAX**] [**MCD**] [**MIN**] [**SD**]

Rate File—TGG21C (See G210)

Time-of-Use File—TGE31D (See Y310)

Holiday File—TGE31C (See Y310)

**G310 —COSI GLDB Data Editor**

Control File—TGG31A

Format for cuts start-time

*mm/dd/yy-hh:mm* (for example, 01/23/89—00:01)

*mmddyyhhmm* (for example, 0123890001)

Format for creating the Data Editor Control File:

**CHAnge** *rate-class-prefix1 start-time1* **TO** *rate-class-prefix2 start-time2*

**COPy** *rate-class-prefix1 start-time1* **TO** *rate-class-prefix2 start-time2*

**ERAse** *rate-class-id start-time*

**KEY** *rate-class-prefix start-time*

**MODify** *time* **VALUE** *z1* [*z2 z3 …zn*]

**G410— COSI Rates Reporter**

Title File—TGG41C

**DAILY**
**MONTHLY**

**INIT**
**PRMS**
**GNR1**
**GNR2**
**LOSS**

**AWD**
**AWE**
**DEMand**

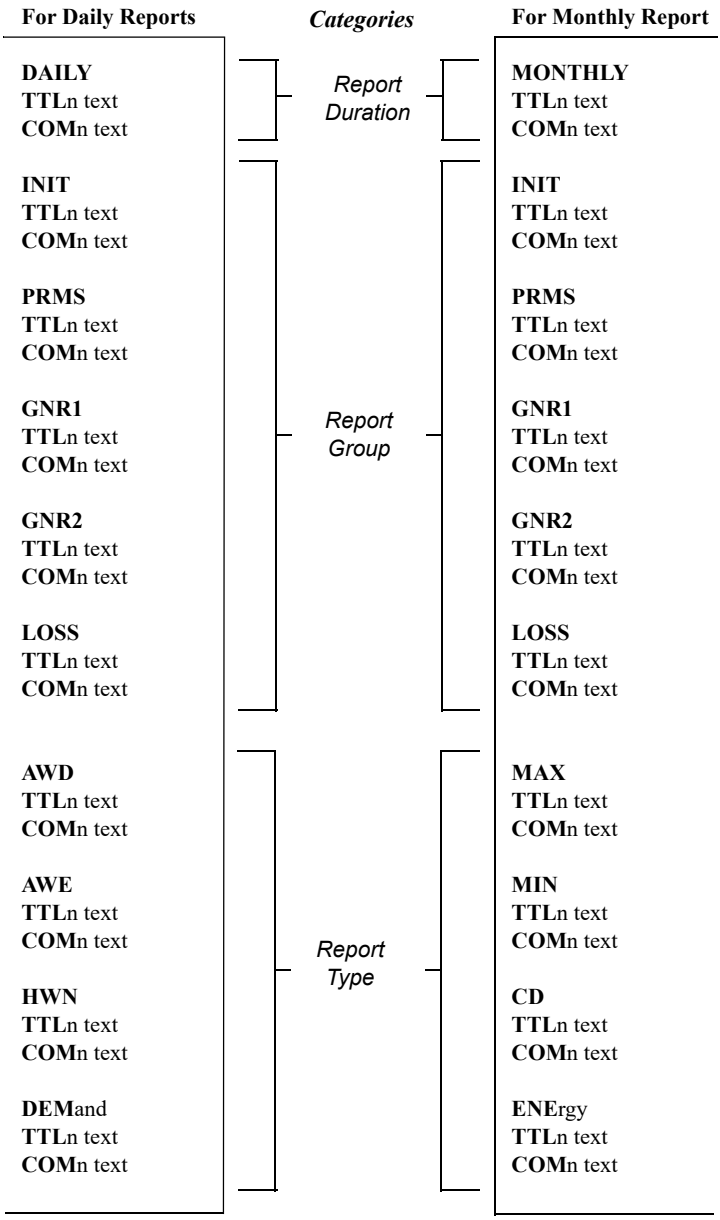
**CD**
**ENErgy**
**MAXimum**
**MINimum**

**TTL** *n text*
**COM** *n text*

(Continued Next Page)

**G410— COSI Rates Reporter** (Continued)

Format for Title File




Rate File—TGG21C (See G210)

Time-of-Use File—TGE31D (See Y310)

Holiday File—TGE31C (See Y310)

(Continued Next Page)

**G410— COSI Rates Reporter** (Continued)

Environment File—TGG41B

**DATe** *start-date stop-date*

**DURation** [**BOTh** | **MONthly** | **DAIly**]

**GROup** [**ALL** | [**INIT**][,**PRMS**][,**GNR1**][,**GNR2**][,**LOSS**] ]

**PAGe** [*n* | 60]

**SCHedule** [*n* | 0]

**TYPe** [**ALL** |
[**AWD**][,**AWE**][,**CD**][,**DEMand**][,**ENErgy**][,**HWN**][,**MAXimum**][,**MINimum**]]

**VERsion** [*n* | 0]

**G430 —COSI GLDB Time Series Reporter**

Control File—TGG43A

**REPort** *report-name*

**TLn** [*title-line* | **NULL** | **BLANK**]

**KEY** *customer-id*, *channel* [,*start-date*] [,**SUM** | ,**NOSum**]
[,**PEAk** | ,**NOPeak**] [,**DEC** (*n*) | **DEC** (2)] [**CHI1** '*head1*'] [**CH2** '*head2*']

Environment File—TGG43B

**DATe** *start-date stop-date*

**FILe** [**NO** | **YES** [**BLOck** | **NOBlock**] [**DATes** | **NODates**] ]

**G440— COSI GLDB Summary Reporter**

Environment—TGG44B (See G210)

**DATe** [*start-time stop-time* | **ALL**]

**SELect** [**KEY** | **ALL**]

**SOUrce** {**GLDB**}

Control File—TGG44A

*Cust-id*, *channel*

**G450— COSI RLDB Summary Reporter**

Environment (See G440)

**SOUrce** {**RLDB**}

**G610— COSI Cost Allocators**

Environment File—TGG61B

**CUStomer** [**AVErage** | **MONth** *month-name* |
**INPut** *rate-class-prefix1 pop1*
*rate-class-prefix2 pop2*
*rate-class-prefixN popN*
**END**]

**DATe** *start-date1 stop-date1* [*start-date2 stop-date2*]

**DEMand** [**CD** *n* | **NCP** | **AVE** *n* | **EOM** *n* | **ALL** *n* | **SEP** [*n* | 1] ]

**GROup** [**PRMS** | **GNR1** | **GNR2**]

**PAGe** [*n* | 60]

**PEAk** *mm/dd/yy—hh:mm*

**SCHedule** [*n* | 0]

**SEAson** [*n* | 0]

**SOUrce** [**ALL** | **RLDB** | **GLDB**]

**TITle** *text*

**VERsion** [*n* | 0]

Title File—TGG61C

**TTL1** *text*

**TTL2** *text*

Rate File—TGG21C (See G210)

Time-of-Use File—TGE31D (See Y310)

Holiday File—TGE31C (See Y310)

Season File—TGG61D

*Season-schedule*, *season-number*, *tou-schedule*, *start-time*, *stop-time*, *season-name*

**FILE HEADER RECORD:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'HDR' |
| #RATES | PIC '9999' | Number of Rate classes, including System and subtotals, profiled in this file |
| #TOU | PIC '99' | Number of Time-of-Use periods |
| START-DATE | PIC '999999' | First date in date range (MMDDYY) |
| STOP-DATE | PIC '999999' | Last date in date range (MMDDYY) |
| DATA LEVEL | CHAR (4) | Level of data used (PRMS, GNR1, or GNR2) |
| DEM MON# | PIC '99' | Number of months over which System Peak Demand was averaged |
| SCHEDULE# | PIC '99' | Time-of-Use Schedule being used, or 0 if Season Schedule is used |
| IPH | PIC '999' | Intervals Per Hour |
| VERSION | PIC '9' | Test data version used for this run |
| UOM | CHAR (2) | Unit of Measure used (KW or MW)—from Rate File |
| DECIMALS | PIC'9' | Number of assumed decimal places in amount fields (from Rate File) |
| SYSTEM PEAKS(12) | | |
| DATE | PIC '999999' | MMDDYY of System Peak |
| HOUR ENDING | PIC '99' | Hour Ending (1-24)<br>Note: The number of these pairs of fields containing actual data will be = DEM MON#;; the rest will be zero-filled.<br><br>If season processing is done, these fields are zero-filled, and separate system peak data is written for each season in Season Header Record 3. |

**FILE HEADER RECORD2:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'HD2' |
| #RANGES | PIC '99' | Number of Date Ranges (1 to 2) |
| START-DATE-2 | PIC '999999' | Start date in second date range (MMDDYY), or 0 if # RANGES = 1 |
| STOP-DATE-2 | PIC '999999' | Stop date in second date range (MMDDYY), or 0 if # RANGES = 1 |
| SEASON SCHEDULE | PIC '99' | The Season Schedule used, or 0 if more used |
| SEASON COUNT | PIC '99' | The number of distinct seasons contained in the analysis period, or 0 if Season Schedule is not used. |
| SYSTEM MINIMUMS(12) | | MMDDYY of system Minimum |
| DATE | PIC '999999' | |
| HOUR ENDING | PIC '99' | Hour Ending (1-24)<br>Note: the number of these pairs of fields containing actual data will be = DEM MON#; the rest will be zero-filled. |
| FILLER | CHAR (15) | Blanks |

**FILE HEADER RECORD3:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'HD3' |
| #SUPP-PEAKS | PIC '99' | Number of Supplied Peaks |
| SUPPLIED PEAKS(12) | | |
| DATE | PIC '999999' | MMDDYY of this Supplied Peak |
| HOUR ENDING | PIC '99' | Hour Ending (1-24) |
| FILLER | CHAR(31) | Blanks |

(Continued Next Page)

**SEASON HEADER RECORD1:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'SH1' |
| SEASON-NUMBER-1 | PIC '99' | Season number from the Season File (1-9) |
| SEASON #TOU | PIC '99' | Number of Time-of-Use periods in this season. |
| SEASON RANGES (10) | | |
| SEASON-START-DATE | PIC '999999' | First date in a portion of this season (MMDDYY) |
| SEASON-STOP-DATE | PIC '999999' | Last date in a portion of this season (MMDDYY) |
| FILLER | CHAR (5) | Blanks |

**SEASON HEADER RECORD2:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'SH2' |
| SEASON-NUMBER-2 | PIC '99' | Season number (same as Season-Number-1) |
| SEASON RANGES (2) | | (Filled only if there are more than 10 portions of this season.) |
| SEASON-START-DATE | PIC '999999' | First date in a portion of this season (MMDDYY) |
| SEASON-STOP-DATE | PIC '999999' | Last date in a portion of this season (MMDDYY) |
| #SEASON-SUPP-PEAKS | PIC '99' | Number of Supplied Peaks in this Season |
| SEASON SUPPLIED PEAKS(12) | | |
| DATE | PIC '999999' | MMDDYY of this Supplied Peak |
| HOUR ENDING | PIC '99' | Hour Ending (1-24) |
| FILLER | CHAR (5) | Blanks |

**SEASON HEADER RECORD3:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'SH3' |
| SEASON-NUMBER-3 | PIC '99' | Season number (same as Season-Number-1) |
| SEASON NAME | CHAR(30) | Name of season from Season File |
| SEASON SYSTEM PEAKS (12) | | |
| DATE | PIC '999999' | MMDDYY of monthly System Peak for this season |
| HOUR ENDING | PIC '99' | Hour Ending (1-24)<br>Note:The number of these pairs of fields containing actual data will be = DEM MON#, unless there are fewer months in this season, in which case only that lesser number of pairs will<br>be filled; the rest will be zero-filled. |
| FILLER | CHAR(1) | Blanks |

(Continued Next Page)

**ENERGY RECORD**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'NRG' |
| RATE CLASS | CHAR (6) | Rate class prefix for which this record contains data |
| TOU | PIC '99' | Time-of-Use period for which this record contains data |
| ENERGY AMOUNT | PIC length 12 *See note | Total Energy use for this Rate and Time-of-Use period |
| ENERGY SEASON | PIC '99' | Season number for which this record contains data, zero-filled if season processing is not being done. |
| FILLER | CHAR (107) | Blanks |

**COINCIDENT DEMAND RECORD:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'CD' |
| RATE CLASS | CHAR (6) | Rate-class prefix for which this record contains data |
| TOU | PIC '99' | Time-of-Use period for which this record contains data |
| CD AMOUNT | PIC length 12 *See note | Average Coincident Demand for this Rate and Time-of-Use period (averaged over DEM MON# months of highest System Peak) |
| CD SEASON | PIC '99' | Season number for which this record contains data, zero-filled if season processing is not being done. |
| FILLER | CHAR (107) | Blanks |

**NON-COINCIDENT DEMAND RECORD:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD | CHAR (3) | 'NCP' |
| RATE CLASS | CHAR (3) | Rate-class prefix for which this record contains data |
| TOU | PIC '99' | Time-of-Use period for which this record contains data |
| NCP DATE | PIC '999999' | MMDDYY the Peak occurred |
| NCP HOUR | PIC '99' | Hour Ending (1-24) of the Peak |
| NCP AMOUNT | PIC length 12 *See note | Highest Non-Coincident Peak for this Rate and Time-of-Use period over the entire Data Range |
| NCD SEASON | PIC '99' | Season number for which this record contains data, zero-filled if season processing is not being done. |
| NCP FILLER | CHAR (99) | Blanks |

*NOTE: The amount fields marked with an asterisk are written to the file using a variable number of implied decimal places. This number is determined by the #DEC value entered in the Rate File, is the same as the number of decimal places shown on the Cost Allocation Reports, and is given in the DECIMALS field of the Header Record. Thus, if DECIMALS contains the value 03, the actual format for ENERGY AMOUNT would be PIC '(9)9v99'.

(Continued Next Page)

**AVERAGE AND EXCESS RECORD:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'AVE' |
| RATE CLASS | CHAR (6) | Rate-class prefix for which this record contains data |
| TOU | PIC '99' | Time-of-Use period for which this record contains data |
| NCP DATE | PIC '999999' | MMDDYY the Peak occurred |
| NCP HOUR | PIC '99' | Hour Ending (1-24) of the Peak |
| NCP AMOUNT | PIC, length 12 | Highest Non-Coincident Peak for this Rate and Time-of-Use period over the entire Data Range |
| A&E AMOUNT | PIC, length 12 | Average and Excess Amount |
| ENERGY AMOUNT | PIC, length 12 | Total Energy for Rate and TOU Period |
| A&E SEASON | PIC '99' | Season number for which this record contains data, zero-filled if season processing is not being done. |
| FILLER | CHAR (75 | Blanks |

**EXCESS OVER MINIMUM RECORD:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'EOM' |
| RATE CLASS | CHAR (6) | System class (this record written for System only) |
| TOU | PIC '99' | Time-of-Use period for which this record contains data |
| AVERAGE MINI-MUM | PIC, length 12* | The Average minimum demand for this Time-of-Use period (Aveage of DEM MON# lowest system minimum demands) |
| MINIMUM SALES | PIC, length 12* | Product of the above and the number of hours for this Time-of-Use period (in ths season, if season processing is being done) |
| SALES OVER MIN. | PIC, length 12* | Difference between actual sales and the above field |
| AVG. EXCESS OVER MINIMUM | PIC, length 12* | The above field divided by the number of hours in the Time-of-Use periods |
| TOU HOURS | PIC '9999' | The number of hours in this Time-of-Use period (and within this season, if season processing is being done), used in calculating the above fields. |
| EOM SEASON | PIC '99' | Season number for which this record contains data, zero-filled if season processing is not being done |
| FILLER | CHAR (67) | Blanks |

**SUPPLIED PEAK RECORD:**

| Field Name | Format, Length | Contents |
|---|---|---|
| RECORD ID | CHAR (3) | 'SUP' |
| RATE CLASS | CHAR (6) | Rate-class prefix for which this record contains data |
| TOU | PIC '99' | '01' (Entire Period) |
| SUPP. AMOUNT | PIC, length 12* | Supplied Peak Amount |
| SUPP. SEASON | PIC '99' | Season number for which this record contains data, zero-filled if season procesing is not being done |
| FILLER | CHAR (107) | Blanks |

*NOTE: See NOTE following NON-COINCIDENT DEMAND RECORD file format.

**G710— COSI Statistics Output**

Environment File—TGG71B

**DATe** *start-date stop-date*

**GROup** [**GNR1** | **GNR2** | **INIT** | **PRMS**]

**SCHedule** [*n* | 0]

**VERsion** [*n* | 0]

Rate File—TGG21C (See G210)

Time-of-Use File—TGE31D (See Y310)

**G720— COSI Direct Output**

Environment—TGG72B

**DATe** *start-date stop-date*

**SOUrce** [**BOTH** | **GLDB** | **RLDB**]

Control File—TGG72A

*Customer-id*, *version-number* [,*start-time*]

**G810— COSI GLDB Key Generator** (See Y810)

The following variables are not valid for the GLDB:

| | | |
|---|---|---|
| **ARCHIVE** | **MOFFSET** | **POFFSET** |
| **EDITED** | **MMULT** | **PSUM** |
| **EXTVALID** | **MSTART** | |
| **INTVALID** | **MSTOP** | |
| **MERGE** | **PMULT** | |

**Load Data Status Codes**

| Status Code | Description |
|---|---|
| ‘ ‘ | Normal |
| ‘A’ | Normal, alternate-record (e.g., hand-entered) |
| ‘J’ | Data inserted by Oracle Utilities Load Analysis to correct outage |
| ‘L’ | Default for data modified by Load Data Editor |
| ‘N’ | Interruptible or curtailable load |
| ‘P’ | Inserted outage |
| ‘Q’ | Corrected outage |
| ‘X’ | Cuts resulting from merging invalid data or from unrecognized status-codes |
| ‘Y’ | Reserved |
| ‘1’ | Uncorrected outage (also called loss of potential) |
| ‘2’ | Non-normal (usually timing-pulse defects) |
| ‘5’ | Aggregated interval used in rolling format with partially missing or unavailable data |
| ‘7’ | Aggregated or transformed interval with partially missing data |
| ‘9’ | Missing |

**Unit of Measure Codes**

**Code Description**

01 — KWH
02 — KW
03 — KVARH
04 — KVAH
05 — TEMP (°F)
06 — KQD
07 — $V^2H$ (PTP)
08 — KQH
09 — KQH (45 degrees)
10 — $I^2H$
11 — Volts
12 — Amps
13 — TEMP (°C)
14 — Dew Point
15 — Amplitude
16 — Miscellaneous
17 — Minute Run Time (MRT)
18 — Wind Velocity (cms)
19 — V2H (PTN)
20 — Percent
21 — Flow
22 — KVAR
23 — KVA
24 — KVA Ratio
25 — Power Factor
26 — Hertz
27 — Feet
28 — Minutes
29 — On/Off (Tap Position)
30 — Inches
31 — Individual KWH
32 — KWH r
33 — Individual Totalized KVARH
34 — KVARH r
35 — Individual Totalized Temp (°F)
36 — KVAH r
37 — Individual Totalized $V^2H$
38 — Individual Totalized KQH
39 — KQH r
40 — Miscellaneous — Average
41 — Individual Totalized Volts
42 — Individual Totalized Amps
43 — Individual Totalized Temp (°C)
44 — MW (Substation only)
45 — MVAR (Substation only)
46 — MVA (Substation only)
47 — Individual Totalized MRT
48 — Individual Totalized CMS
49 — Run Hours
50 — EQV.FULL LD Hours

**Code Description**

51 — KWH-Out
52 — KW-Out
53 — KVARH-Out
54 — KVAH-Out
55 — KQH-Out
56 — Leading KVARH
57 — Leading KVARH-Out
58 — Lagging KVARH
59 — Lagging KVARH-Out
60 — Gallons Per Minutes (GPM)
61 — BTU
62 — Therms
63 — Cubic Feet Per Minute (CFM)
64 — Cubic Feet Per Second (CFS)
65 — $WM^2$
66 — Relative Humidity (RH)
67 — MPH
68 — THI
69 — Gallons
70 — Cubic Feet
71 — Temp Difference
72 — KVAR-Out
73 — KVA-Out
74 — Knots
75 — Degrees
76 — Hundred Cubic Feet (Gas)
77 — Cubic Feet Per Hour (Gas)
78 — Pounds Per Square Inch
79 — Dollars
80 — Decatherms (DTH)
81 — Pounds
82 — Pounds Per Hour
83 — MPounds
84 — MPounds Per Hour
85 — Dollars Per KWH
86 — Dollars Per MW
87 — Dollars Per MWH
88 — Dollars per Hour
89 — Volt Hours
90 — Individual Totalized Cubic Feet
91 — Individual Totalized BTU
92 — Pressure in Millibars
93 — Visibility in Miles
94 — Cents per KWH
99 — Individual Totalized Gallons
100 — MWH
102 — Euros
103 — Euros per MWH
104 — Euros MW
105 — GW
106 — TWH
107 — Cubic Meters (M3)
108 — Mega Joules per Cubic Meter (MJ/m3)
109 — Kilograms per Cubic Meter (Kg/m3)
110 — Cubic Meters per Hour (M3/h)

**Key Generator Variable List**

| Variable | Format |
|---|---|
| ARCHIVE | flag |
| CFIELD | character 1 |
| CHANNEL | character 1 |
| CUSTID | character 20 |
| CUSTID | character i |
| DESC | character 80 |
| EDITED | flag |
| EXTVALID | flag |
| INTVALID | flag |
| IPH | integer |
| MERGE | flag |
| MMULT | real |
| MOFFSET | real |
| MSGi | character 80 |
| MSTART | real |
| MSTOP | real |
| OLD KEY | character 34 |
| PMULT | real |
| POFFSET | real |
| PSUM | integer |
| RECTYPE | character 1 |
| START | mm/dd/yy-hh:mm |
| STARTDAT | mm/dd/yy |
| STOP | mm/dd/yy-hh:mm |
| STOPDAT | mm/dd/yy |
| TOTINT | integer |
| UOM | character 2 |

**Wildcard Examples**

"Does the variable CUSTID contain AGG?"

CUSTID =* 'AGG'

"Does the variable CUSTID contain AGG starting in column 4?"

CUSTID =? ???AGG

**Variable Formats**

| Variable | Allowed Values |
|---|---|
| billed-energy | actual/billed energy |
| bound | non-negative number |
| comment | characters |
| channel, chan1, chan2 . . . chanx | single digit 0-9 |
| ci (unit of measure) | 2 character code |
| component key | 4-6 character prefix, usually ‘STAR’ |
| customer-id | character 20 |
| d (device no., plotter) | numeric |
| data | non-negative integer, <32760 |
| day-list | 1 - Sunday<br>2 - Monday<br>3 - Tuesday<br>4 - Wednesday<br>5 - Thursday<br>6 - Friday<br>7 - Saturday<br>8 - Holiday |
| descriptor | character 80 |
| descriptor 1 | character 40 |
| descriptor 2 | character 40 |
| domain | character 1 |
| e1, e2 | range, ratio of meter energy to pulse |
| energy | |
| factor | value between 0 and 1 |
| iph | 1, 2, 4, 12, or 60 |
| jid | character 8 |
| k | non-negative integer |
| key, key1, key2 | customer-id, channel, start-time |
| label | alphanumeric, 1-8; last position<br>must be ’:’;<br>first must be alphabetic |
| legend | 20 characters |
| mmult | non-zero, positive real number |
| moffset | real number |
| mpi (minutes per interval) | 1, 5, 15, 30 or 60 |
| mstart | positive real number |
| mstop | positive real number |
| m1, m2 | integer |
| n | non-negative integer |
| op | + add<br>- subtract<br>* multiply<br>/ divide<br>**exponentiate |
| output-key | 4-6 character prefix |
| p (population, popln) | non-negative integer |
| peak-time | mm/dd/yy-hh:mm |
| period | period number |
| pmult | non-zero, positive real number |
| poffset | real number |
| popln (population) | non-negative integer |
| ps (page selection) | positive real number |
| q | status code |

| Variable | Allowed Values |
|---|---|
| rectype | S, T, D, V |
| remark | character 50 |
| s | status code |
| sch# | schedule number |
| spi | 86400, 3600, 1800, 900, 300, 60 |
| start-time | mm/dd/yy-hh:mm or mmddyyhhmm |
| status | single alphanumeric value |
| stop-time | mm/dd/yy-hh:mm or mmddyyhhmm |
| strata, strata-number | non-negative integer |
| system-code | 8 digit number |
| t | time of use schedule number |
| text-field | 80 characters |
| time, time1, time2, time3 | mm/dd/yy-hh:mm or mmddyyhhmm |
| time-range | pair of times<br>h1:m1 h2:m2 |
| TZSN | See "LSCALENDAR.CFG.XML" on page 2-23 of the Oracle Utilities Energy Information Platform Configuration Guide |
| title | character 76 |
| tly (y-axis label) | character 60 |
| t1, t2 | 1, 5, 15, 30 or 60 |
| tl1 (primary plot title) | character 40 |
| tl2 (primary plot title) | character 40 |
| type | kind of analysis<br>RATio<br>COMbined<br>SEParate<br>STAndard |
| unit | 2 digit unit-of-measure code |
| w (weight) | any number between 0 and 1 |
| xlen (x-axis, plotter) | positive real number |
| ylen (y-axis, plotter) | positive real number |
| z, z1, . . . z29 | any numeric format, may be negative |

# Report Qualifiers

**Analysis Statistic Names**

**Report Qualifiers**

| Code | Descriptors |
|---|---|
| AD | Average Day Demands (KW) |
| ADX | Average Day Demands Excluding Holidays (KW) |
| CD | Maximum Coincident Demands (KW) |
| CF | Coincidence Factors |
| DEM | Average Demand Period |
| DF | Diversity Factors |
| ENTR | Entire Period Demands (KW) |
| FRI | Average Friday Demands (KW) |
| HWN | Average Holiday and Weekend Demands (KW) |
| LFC | Load Factors Based on Maximum Coincident Demands |
| LFN | Load Factors Based on Noncoincident Demands |
| MCD | Minimum Coincident Demand (KW) |
| MON | Average Monday Demands (KW) |
| MNEN | Day of Class Minimum Demands (KW) |
| MNT01 | Day of Class Minimum TOU Period1 Demands (KW) |
| MNT02 | Day of Class Minimum TOU Period2 Demands (KW) |
| MXEN | Day of Class Peak Demands (KW) |
| MXP01 | Day of Supplied Peak 01 Demands (KW) |
| MXT01 | Day of Class Peak TOU Period 01 Demands (KW) |
| MXT02 | Day of Class Peak TOU Period 02 Demands (KW) |
| NCD | Noncoincident Demands (KW) |
| NGY | Energy (KWH (Prorated)) |
| SAT | Average Saturday Demands (KW) |
| SDR | Standard Deviation of Sample Residuals of Demand (KW) |
| SMPL | Standard Deviation of Sample Demand (KW) |
| SUN | Average Sunday Demands (KW) |
| THU | Average Thursday Demands (KW) |
| TUE | Average Tuesday Demands (KW) |
| USD | User Supplied Days |
| WD | Average Weekday Demands (KW) |
| WDH | Average Weekday Holiday Demands (KW) |
| WDX | Average Weekday Demands Excluding Holidays (KW) |
| WED | Average Wednesday Demands (KW) |
| WN | Average Weekend Demands (KW) |
| WNH | Average Weekend Holiday Demands (KW) |
| WNX | Average Weekend Demands Excluding Holidays (KW) |

**Statistic Qualifiers**

| Code | Descriptors |
|---|---|
| AVRG | Sample Mean |
| CMEN | Combined Ratio Mean KW |
| CPRE | Combined Relative Precision |
| CRAT | Combined Ratio |
| CSDR | Combined Standard Deviation of Residuals |
| DUR | Load Duration |
| FREE | Degrees of Freedom |
| MEAN | Sample Mean |
| POPL | Population |
| PREC | Relative Precision |
| RMEN | Ratio Mean KW |
| RPRE | Relative Precision |
| RRAT | Ratio |
| RSIZ | Sample Size |
| SCOR | Expansion Correlation (KW, KWH) |
| SECM | Standard Error Combined Ratio Mean KW |
| SERM | Standard Error Ratio Mean KW |
| SESM | Standard Error of Sample Mean |
| SESP | Standard Error Separate Ratio Mean KW |
| SETL | Standard Error of Sample Total |
| SIZE | Sample Size |
| SMEN | Separate Ratio Mean KW |
| SPRE | Separate Relative Precision |
| SSDR | Separate Standard Deviation of Residuals |
| SSIZ | Sample Size |
| SSTU | 10% T-Statistic |
| STDV | Standard Deviation of Sample Demand |
| TOTL | Total Demand |

## Standard Input/Output Record Formats

**First Header Record Format**

| ELEMENT | DESCRIPTION | ATTRIBUTES | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | PIC '9999' | 4 |
| 2 | Customer Identifier | CHAR(20) | 20 |
| 3 | Channel | PIC '9' | 1 |
| 4 | Start Time | PIC'(10)9' | 10 |
| 5 | Stop Time | PIC'(10)9' | 10 |
| 6 | Intervals-per-hour | PIC'99' | 2 |
| 7 | Unit-of-Measure | PIC'99' | 2 |
| 8 | Alternate Format | PIC'9' | 1 |
| 9 | Filler | CHAR(30) | 30 |

**Second Header Record Format**

| ELEMENT | DESCRIPTION | ATTRIBUTES | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | PIC '9999' | 4 |
| 2 | Meter Start Reading | PIC'(6)9V9' | 7 |
| 3 | Meter Stop Reading | PIC'(6)9V9' | 7 |
| 4 | Meter Multiplier | PIC'(10)9V(5)9' | 15 |
| 5 | Pulse Multiplier | PIC'(10)9V(5)9' | 15 |
| 6 | Meter Offset | PIC'S(10)9V(5)9' | 16 |
| 7 | Pulse Offset | PIC'S(10)9V(5)9' | 16 |

**Third Header Record Format**

| ELEMENT | DESCRIPTION | ATTRIBUTES | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | PIC '9999' | 4 |
| 2 | Descriptor | CHAR(40) | 40 |
| 3 | Alternate Pulse Multiplier (≥ 1.0) | PIC'V(15)9' | 15 |
| 4 | Population | PIC'(9)9' | 9 |
| 5 | Weight | PIC'(7)9V(5)9' | 12 |

**Fourth Header Record Format**

| ELEMENT | DESCRIPTION | ATTRIBUTES | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | PIC '9999' | 4 |
| 2 | Descriptor | CHAR(40) | 40 |
| 3 | Peak Day | CHAR(14) | 14 |
| 4 | Old Key | CHAR(14) | 14 |
| 5 | Filler | CHAR(8) | 8 |

**Data Record Format**

| ELEMENT | DESCRIPTION | ATTRIBUTES | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | PIC '9999' | 4 |
| 2 | Interval(12) | | (12)*6 |
| | Load Data Array | PIC'99999' | 5 |
| | Status Array | CHAR(1) | 1 |
| 3 | Filler | CHAR(4) | 4 |

## Enhanced Input/Output Record Formats

**First Header Record Format**

| ELEMENT | DESCRIPTION | COMMENT | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | Must be 00000001 | 8 |
| 2 | Customer Identifier | | 64 |
| 3 | Channel | Max is 32767 | 5 |
| 4 | Start Time | YYYYMMDDHHMMSS | 14 |
| 5 | Stop Time | YYYYMMDDHHMMSS | 14 |
| 6 | DST Participant Flag | Y/N/A | 1 |
| 7 | Validate Record Flag | Y/N | 1 |

**Second Header Record Format**

| ELEMENT | DESCRIPTION | COMMENT | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | Must be 00000002 | 8 |
| 2 | Meter Start Reading | Non-negative Numeric | |
| 3 | Meter Stop Reading | Non-negative Numeric | |
| 4 | Meter Multiplier | Postive Numeric | |
| 5 | Meter Offset | Numeric | |
| 6 | Pulse Multiplier | Postive Numeric | |
| 7 | Pulse Offset | Numeric | |
| 8 | Seconds per Interval | Postive Numeric | |
| 9 | LODESTAR UOM | Numeric | |
| 10 | Basic Unit Code | Positive Numeric | |
| 11 | Times Zones | Numeric | |
| 12 | Population | Positive Numeric | |
| 13 | Weight | Positive Numeric | |
| 14 | Time Zone Standard Name | CHAR (32) | 32 |

**Third Header Record Format**

| ELEMENT | DESCRIPTION | COMMENT | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | Must be 00000003 | 8 |
| 2 | Descriptor | | 80 |

**Fourth Header Record Format**

| ELEMENT | DESCRIPTION | COMMENT | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | Must be 00000004 | 8 |
| 2 | Timestamp | | 17 |
| 3 | Origin | C, M, P, or S (Optional) | 1 |

**Data Record Format**

| ELEMENT | DESCRIPTION | COMMENT | LENGTH IN BYTES |
|---|---|---|---|
| 1 | Sort Code | 10000000 - 99999999 | 8 |
| 2 | Interval Value | | |
| 3 | Oracle Utilities Load Analysis Status Code | | 1 |
| 4 | Interval Start Time | YYYYMMDDHHMMSS | 14 |

**Note:** For more information about Enhanced Input/Output Format, please see Appendix B of the Oracle Utilities Energy Information Platform Installation and Configuration Guide.

*Oracle Corporation*