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Contents

Chapter 1	
Working with Oracle Utilities Rate Management	
Starting Oracle Utilities Rate Management	
From the Windows Desktop	
From Another Application	
Oracle Utilities Rate Management Menus	
File Menu	
Edit Menu	
Analysis Menu	
Records Menu	
View Menu	
Tools Menu	
Window Menu	
Help Menu	
Oracle Utilities Rate Management Toolbar	
Default Options	
General Options	
Rate Analysis Options	
Billing Options	
Interval Data Source	
Interval Data Options	
Interval Data Merge	
Error Handling	
User Files	
Browsing and Viewing Account Data	
Report Options	1-16
General Options	1-16
Print Detail Options	
Problem Determination Options	
Bill Calculation Results Columns Options	
Viewing and Printing Reports	
Viewing and Searching Reports	1-19
Moving to a Specific Line in a Report	1-19
Changing the Appearance of Reports	1-19
Printing Reports	1-19
Creating Graphs	
Using Online Help	
Help Icons	
Context-Sensitive Help	
Shortcut Tips	
Account ID Hyperlinks	
Copying Text Between Windows	
Saving and Applying Settings for Dialog Boxes	
Important Note	

International and Multiple Currency Support	
Locales and Languages	
Date and Numeric Presentation	
Currency Presentation	
Multiple Currency Support	
File Formats	
Database Support	
Oracle Utilities Rate Management Documentation Overview	
Chapter 2	
Creating Bill Frequency Tables, Reports, and Revenue Analyses	2-1
Purpose of Bill Frequency Tables and Analysis	
Required Inputs for Creating Bill Frequency Tables	
Bill Frequency Table Description	
Creating a New Blocking	
Creating a Bill Frequency Table	
Reporting or Graphing a Bill Frequency Table	
About the Bill Frequency Analysis Report Format	
Creating a Bill Frequency Revenue Analysis	
Chapter 3	
Customer Revenue Analysis	3_1
Purpose of Customer Revenue Analysis	
Required Inputs	
Running a Customer Revenue Analysis	
Chapter 4	
Single Step Analysis	
Purpose of Single Step Analysis	
Required Inputs	
Running a Single Step Analysis	4-3
Chapter 5	
Adjusting Revenue and Price Using Revenue Simulation	5-1
Purpose of Revenue Simulation	
Required Inputs	
Running a Revenue Simulation	5-3
The Revenue Simulation Window	
Chapter 6	
Customer Impact Analysis (Rate Comparisons)	6-1
The Purpose of Customer Impact Analysis	
Required Inputs	
Running a Customer Impact Analysis	
Chapter 7	
Generating Typical Bill Scenarios	7-1
The Purpose of Typical Bill Analysis	
Required Inputs	
Running a Typical Bill Analysis	
Chapter 8	
Finding Crossing Points Between Rate Schedules	8_1
The Purpose of Crossing Point Analysis	
Required Inputs	
Analyzing Crossing Points	

Chapter 9

Managing your Portfolio of Rate Schedules with Revenue Adequacy	
Purpose of Revenue Adequacy	
Required Inputs	
Running a Revenue Adequacy Analysis	
Deleting a Revenue Adequacy Analysis	
Chapter 10	
The Minimum Bill Report	10_1
Purpose of the Minimum Bill Report	
Required Inputs	
Minimum Bill Report Calculations	
Billing Determinant Values	
Calculated Revenue Values	
Number of Accounts Receiving a Minimum Bill	
Running a Minimum Bill Report	
Turning On the Minimum Bill Report	
Minimum Bill Report Processing	
Sample Minimum Bill Report Rate Schedule and Rider	
Sample Minimum Bill Report Output	
Chapter 11	
Running the Hours Use Matrix Report	
The Purpose of the Hours Use Matrix Report	
Required Inputs	
Running the Hours Use Matrix Report	
Appendix A	
Mapping Rate Codes Between Rate Schedules	A-1
Purpose of the Interschedule Mapping Table	A-2
Some Important Rules for Mapping Codes	A-3
Mapping Rate Codes	A-3
Appendix B	
Setting Up Oracle Utilities Rate Management to run in Batch Mode	Р 1
Customer Impact	
CUSTIMPACT Command Syntax	
Customer Revenue	
CUSTREVENUE Command Syntax	
Bill Frequency	
BILLFREQUENCY Command Syntax	
Typical Bill	
TYPICALBILL Command Syntax	
Crossing Point	
CROSSINGPOINT Command Syntax	
Hours Use Matrix	
HOURSUSEMATRIX Command Syntax	

Index

Chapter 1

Working with Oracle Utilities Rate Management

This chapter describes how you work with the Oracle Utilities Rate Management application, including:

- Starting Oracle Utilities Rate Management
- Oracle Utilities Rate Management Menus
- Oracle Utilities Rate Management Toolbar
- Default Options
- Browsing and Viewing Account Data
- Report Options
- Viewing and Printing Reports
- Using Online Help
- Shortcut Tips
- Saving and Applying Settings for Dialog Boxes
- International and Multiple Currency Support
- Oracle Utilities Rate Management Documentation Overview

Starting Oracle Utilities Rate Management

From the Windows Desktop

This section explains how to start Oracle Utilities Rate Management from the Windows desktop. (You can also start Oracle Utilities Rate Management from the command line and use switches to control which database is accessed and other features. Consult your System Administrator.)

Depending upon how your system is configured, you can start Oracle Utilities Rate Management using one of two methods:

- Double-click the Oracle Utilities Rate Management icon, or
- Click the Start button in the lower-left corner of the Windows desktop. Then, select Programs->Oracle Utilities->Oracle Utilities Rate Management.

Depending upon your system configuration (or if an error occurs during database initialization), the logon screen appears.

- User Name: the user ID for the database connection*
- Password: the password for the supplied user ID*
- Data Source Name: The data source name and provider for the database, in one of the following formats:

For Oracle databases:

```
"Data Source=<data_source>;LSProvider=ODP;"
```

* User Name and Password are optional—if you do not supply them, the UserID defaults to your Windows logon ID.

When you complete the fields and click **OK**, the Oracle Utilities Rate Management desktop appears. You are now ready to begin.

From Another Application

You can start Oracle Utilities Rate Management while working in another Oracle Utilities application program, such as Data Manager or Oracle Utilities Billing Component. From that program's desktop, select **Tools->Oracle Utilities Rate Management**.

Note: If Oracle Utilities Rate Management is not available on the Tools menu, contact your System Administrator. (Oracle Utilities Rate Management must be added to the *.tls files.)

Oracle Utilities Rate Management Menus

The Oracle Utilities Rate Management menus provide access to all Oracle Utilities Rate Management functions, as well as to all other Oracle Utilities products installed on your system. The following pages describe each option on each menu.

Note: Many of the options available via the menus are also available via the Toolbar. If the Toolbar does not appear on your screen, select **Tools->Display Toolbar**.

File Menu

Browse Customer/Account(s): This lets you view information in the Oracle Utilities Data Repository about selected accounts; information is displayed via the browser. See the *Data Manager User's Guide* for details about the browser. See **Browsing and Viewing Account Data** on page 1-15 for more information

View->Account: This lets you view, update, add, and delete information about a selected account using the Account-Centric View. See **Browsing and Viewing Account Data** on page 1-15 for more information.

Close: Closes an open report window.

Save: Saves an open revenue simulation or revenue adequacy file.

Save As...: Saves an open graph as a *.GIF or *.MET

Export: Exports the contents of an open report window to a file.

Print: Prints the contents of an open report or graph window. See **Viewing and Printing Reports** on page 1-19 for more information.

Exit: Closes the Oracle Utilities Rate Management application.

Edit Menu

Cut: Not applicable to Oracle Utilities Rate Management

Copy: Copies a line of text that you have selected in a report, to the Clipboard where it is available for pasting into other applications such as Word.

Paste: Not applicable to Oracle Utilities Rate Management

Undo: Not applicable to Oracle Utilities Rate Management.

Redo: Not applicable to Oracle Utilities Rate Management.

Add: Add a new record to the database.

Update: Available only when the Browser is active. Update a record in the database.

Delete: Available only when the Browser is active. Delete a record from the database.

Note: The Add, Update, and Delete options are operable only when the browser window is open.

Find - This option allows you to search for a word or words in an open report window. When you select this option (or press F3), the Find dialog opens. See Viewing and Printing Reports on page 1-19 for more information.

Find Next (Shift-F3) - This option finds the next instance of the word or words last entered in the Find dialog.

Find Previous (Ctrl-F3) - This option find the previous instance of the word or words last entered in the Find Dialog.

Go To (Ctrl-G) - This option opens the Go To tab on the Find dialog and allows you to go to a specific line in an open report window.

Browse Account: Examine information in the Oracle Utilities Data Repository for a selected account using the Browser.

Note: You must first highlight an Account ID in a report in order for this feature to be available.

View Account: Examine information in the Oracle Utilities Data Repository for a selected account using the Account-Centric View.

Note: You must first highlight an Account ID in a report in order for this feature to be available.

Refresh Cached Tables: Refreshes the contents of tables displayed in the browser.

Font: Allows you to change the font in an open report window. See Viewing and Printing Reports on page 1-19 for more information.

Analysis Menu

Customer Impact: Analyzes the potential effect of a rate change on a group of accounts. See **Chapter 6**: **Customer Impact Analysis (Rate Comparisons)** for more information.

Customer Revenue: Applies a rate schedule to one or more customers' billing history over a user-specified test period and reports the number of billing units, the revenue per bill determinant, and the total revenue for each bill month and/or entire period. See **Chapter 3**: **Customer Revenue Analysis** for more information.

Single Step: Calculates trial revenue by applying any rate form to a selected account's historical data over a user-specified bill month; you can execute one rate form statement at a time to see the impact of individual charges, and you can even make changes to identifier values and see the results immediately. See **Chapter 4**: **Single Step Analysis** for more information.

Revenue Simulation: Allows you to determine optimum pricing by "working backwards" from the grand summary results of a Customer or Bill Frequency Revenue (in other words, once you have performed a revenue analysis, you can adjust usage values and prices until the total matches revenue requirements). See **Chapter 5**: **Adjusting Revenue and Price Using Revenue Simulation** for more information.

Revenue Adequacy: Sums the revenue for multiple customer groups and determines the difference between this sum and a required total target revenue (requires that revenue analyses for each customer group have already been performed and the results saved to the database). There are two options:

- **Create:** Creates a new revenue adequacy.
- **Open:** Opens an existing revenue adequacy.

See Chapter 9: Managing your Portfolio of Rate Schedules with Revenue Adequacy for more information.

Bill Frequency: Allows you to work with Bill Frequency tables, including the following options:

- **Create:** Creates a Bill Frequency Table for a list of customers or accounts over a specified time period.
- Analysis: Generates a report and/or graph describing the contents of a Bill Frequency Table.
- **Revenue**: Computes revenue for a selected group of customers over a selected time period based on a Bill Frequency Table.

See Chapter 2: Creating Bill Frequency Tables, Reports, and Revenue Analyses for more information.

Typical Bill: Analyzes the effect of a rate schedule change by simulating values for bill determinants. See **Chapter 7**: **Generating Typical Bill Scenarios** for more information.

Crossing Point: Analyzes the revenue differences between two different rate schedules as determinant values vary. See **Chapter 8**: **Finding Crossing Points Between Rate Schedules** for more information.

Hours Use Matrix: Generates a summary report that shows totals for revenue calculations. See Chapter 11: Running the Hours Use Matrix Report for more information.

Records Menu

The Records menu contains options for working with records in the Oracle Utilities Data Repository. Note that the Records menu is only available when the Browser is displayed.

Insert New: Inserts a new record in the selected table.

Filter: Opens the Set Filter dialog and allows you to filter records in the browser based on specified criteria. See the *Data Manager User's Guide* for more information.

Export: Exports all records from a selected table, as well as all associated parent, child, and lookup records, when specified. See the *Data Manager User's Guide* for more information.

Delete: Deletes all records from a selected table, as well as all associated child records. No Export file is created. See the *Data Manager User's Guide* for more information.

Export/Delete: Exports all records* in a selected table, as well as all associated child records, and deletes same records from the database. See the *Data Manager User's Guide* for more information.

Refresh: Refreshes the selected table.

Browse Interval Data: This option opens the Interval Data Browser. This option is only active if you've selected the Channels, Recorders, or Channel History table, or one of the records in one of those tables. If you select a table, the Interval Data Browser displays the entire Interval Database. If you select a single record, the Interval Data Browser displays only the selected record. See the *Data Manager User's Guide* for more information.

Refresh All: Refreshes all the tables in the Oracle Utilities Data Repository.

View Menu

The View menu contains options for altering the view of reports. Note that the View menu is only available when an open report window is displayed.

Note: The contents of the View menu change when viewing graphs. See **Creating Graphs** on page 1-20 for more information.

Graph: Opens the Create Graph dialog and allows you to create a graph based data in the report. This option is only available if the data in the report can be graphed. See **Creating Graphs** on page 1-20 for more information.

Auto Vertical Scroll: Selecting this options causes the last page of the report to be displayed as the report progresses, if it is not checked then no automatic scrolling occurs.

Display Only Pages With Errors: Creates a new report window based on an open report window that contains only pages that contain errors. This option is only available if an open report window contains pages with errors.

Display Only Pages Without Errors: Creates a new report window based on an open report window that contains only pages that contain no errors. This option is only available if an open report window contains pages with errors.

Tools Menu	
	Options: This option provides you with options for tailoring Oracle Utilities Rate Management to your needs and environment. See Default Options on page 1-8 for more information.
	Display ToolBar: This option lets you toggle display of Toolbar on and off. See Oracle Utilities Rate Management Toolbar on page 1-7 for more information.
	Customize: Available in future release. This option lets you make other programs accessible from the Oracle Utilities Rate Management menu bar.
	[application]: This option opens another Oracle Utilities or user-specified application program. If other Oracle Utilities applications are not listed on your Options menu, contact your System Administrator.
Window Menu	
	Cascade: Overlap multiple open windows the desktop, provides largest view of active window.
	Tile: Display multiple open windows side by side.
	Arrange Icons: Organize icons on Oracle Utilities Rate Management desktop.
	Close All: Closes all open windows.
Help Menu	
	Help : Displays on-line help for currently-displayed window. See Using Online Help on page 1-21 for more information.
	Help contents: Displays table of contents for on-line help. See Using Online Help on page 1-21 for more information.
	About: Displays version number of software. Also displays the username, computer/network name, and database name.
	Display Error Window : Displays database version, configuration settings, and error log. Especially useful when calling the HelpLine.

Oracle Utilities Rate Management Toolbar

The Toolbar gives you quick access to the program's most frequently used tools and commands. If the toolbar is not visible, select

Tools->Display ToolBar.



The following describes the function of each Toolbar button. Additional details are provided in other parts of this guide.

Click	То
New	Not available in Oracle Utilities Rate Management.
Open	Not available in Oracle Utilities Rate Management.
Save	Save the currently displayed report.
Print	Print the currently displayed report.
Export	Export the currently displayed report.
Cut	Not applicable to Oracle Utilities Rate Management.
Сору	Copy selected text and store it on the Clipboard.
Paste	Not applicable to Oracle Utilities Rate Management.
Browse	View information in the Customer Database about selected accounts; information is displayed via the Browser.
View Account	View, update, add, and delete information about a selected account using the Account-Centric View.
Error Window	Display database version, configuration file settings, and error log. Useful when calling the Help Line.
Help	Display on-line help for currently displayed window.

Default Options

The Options feature allows you to set your own default values for several frequently used parameters. You can set your preferred defaults via Data Manager or another Oracle Utilities product (such as Oracle Utilities Billing Component) and store them in the Oracle Utilities Data Repository. In that way, whenever you open a Oracle Utilities program, these values are automatically supplied—saving you the time and effort of defining them each and every time.

When you are working in any of the Oracle Utilities application programs, you can also override your defaults for individual work sessions, or even specific dialog boxes throughout the programs. Whenever you see the **Options** button on a dialog box, you can click it to open the Options box to override the defaults.

Available options include:

- General Options
- Rate Analysis Options
- Billing Options
- Interval Data Source
- Interval Data Options
- Interval Data Merge
- Error Handling
- User Files

How to set default options:

- 1. At the Desktop, select **Tools->Options**. *Or*, Click the **Options** button on the current active dialog box.
- 2. Set your options on each tab as desired.
- 3. When you have completed the tabs as desired, click **OK** to save the new settings as your defaults, replacing the previous settings. Any Oracle Utilities program you run will automatically use these defaults. If you click **Apply**, the result depends on how you opened the **Default Options** dialog:
 - If you opened the **Default Options** dialog from the main menu, your new settings apply to all of your work for remainder of your current session. The settings will revert to the original defaults when you quit the Oracle Utilities programs.
 - If you opened the **Default Options** dialog by selecting the Options button in a dialog box, your new settings apply to just the current job.

The next several pages contain detailed information about the Default Option tabs.

General Options

The General tab specifies a number of default values and formatting preferences used by the system.

Default Operating Company: Choose the default operating company for bill calculations and rate analyses.

Default Jurisdiction: Choose the default jurisdiction for bill calculations and rate analyses.

Account ID: Choose the default ID for bill calculations and rate analyses.

Minimum printed line width: The type size in printed reports is partially determined by the number of characters that you specify here. The recommended setting is 110 characters, which yields approximately 10 to 12 point type (depending upon your printer). If you do not supply a value here the programs automatically sizes the type based on the longest line in the report. So for example, if the longest line were 40 characters, the program would size the type so that the 40 characters filled the entire width of the page, which most likely would yield uncomfortably large type. On the other hand, if the longest line in the report is longer than the value you specify here, the value has no effect.

Default to landscape printing after this # of characters: If a line single line in a report contains this many characters, the report will default to landscape printing. This allows the user to print reports in landscape mode without having to manually change the mode in the printer's properties dialog box.

Display calculation time with date on each report page: The date/time is displayed on every page of every report. If this option is checked, the time is also displayed with the date.

Date Format: Your selection here dictates the format used to enter dates via the graphical user interface, and how they are displayed in reports. (This setting is not dependant upon, nor does it affect, how dates are stored by your database software.)

Your three options are:

- MM/dd/yyyy hh:mm:ss: Month-day-year, hours-minutes-seconds.
- yyyy-MM-dd hh:mm:ss: Year-month-day, hours-minutes-seconds.
- Windows Regional Settings: Default Options will draw from the Date tab of the Regional Settings Windows Control Panel.

Using the Windows Regional Settings, you will have greater flexibility in the formats available to you. You can set a 2-digit year (although the 4-digit, Y2K-compliant date will still be used internally), a European format (day-month-year), and so on.

Note: If you change the Windows Regional Settings while an application (Data Manager, Oracle Utilities Billing Component, etc.) is running, you must restart the application in order for the new settings to take effect.

Rate Analysis Options

The Rate Analysis tab specifies default values for processing rate schedules and running reports.

Default Rate Schedule: Choose a default rate schedule for calculating charges. This is the default schedule selected when running trial calculations.

Test Period: Can be any period, one month or greater. This period is used as the default time range for the Billing History Report, Special Events Report, and Trial Calculations.

Default Season Schedule: Select a season schedule for the calculations.

Note: If when running an analysis or calculation, the input rate form includes a statement that assigns a value to the SEASON_SCHEDULE_NAME identifier, the value in the rate form takes precedence over the Options selection.

Display Line Numbers: If this checkbox is checked, the Rules Language Editor and Rules Language Text Editor display line numbers at the beginning of each statement/line. Line numbers also appear in the Trial Calculuation window.

Maximum number of Undo's allowed: This field sets the maximum number of Undos allowed in the Rules Language Editor. The default is 1.

Display 'Saved by' comments at end: If selected, the 'Saved by' comments inserted in rate schedules are inserted at the bottom of rate schedules instead of at the top. This option unselected by default.

Billing Options

The Billing tab specifies how billing information is displayed by the system.

Round Revenue: Specifies the precision of revenue values in reports. *This setting affects only values that have been assigned to revenue identifiers via an Assignment, All, or Block statement in the applicable rate form.* A value of **0** (zero) means don't round, **-1** means round to dollars, **-2** means round to tens of dollars, **1** to tens of cents, **2** to cents, and so on.

Currency displayed to n decimal places: Specifies the number of decimal places shown in reports for dollar values. It is usually set to be consistent with your choice for Round Revenue. A value of **0** (zero) means use the default (display cents), **1** means display tens of cents, **2** means display cents, **3** means display tenths of cents, **4** means display hundredths of cents, and so on.

Note: This setting applies only to Oracle Utilities Billing Component reports; Oracle Utilities Rate Management reports always display dollars with two decimal places (cents).

Billing Units displayed to n decimal places: Specifies the number of decimal places shown in reports for billing units.

Display midnight as 00:00:00 (not blank): Specifies whether or not a value (00:00:00) is displayed and printed when the time is midnight or unspecified.

If you leave this option unchecked (the default), the programs print and display the date without a time when *either* the time has not been specified or the time is midnight. For example, if either 12/01/1998 or 12/01/1998 00:00:00 were specified, the program would display 12/01/1998.

If you check this option, the programs print and display 00:00:00 when the time is either unspecified or midnight. For example, if either 12/01/1998 or 12/01/1998 00:00:00 were specified, the program would display 12/01/1998 00:00:00.

Interval Data Source

The Interval Data Source tab specifies the source of interval data used by the system.

Interval Data Database: Select a Type from the three options:

- File: Specify an interval data file. The File option below becomes active when this button is selected, allowing you to specify a file (and path) in the File Name field, or to **Browse** to a file.
- **Default:** Specifies that the default Interval Data Database identified in the LODESTAR.CFG File be used. See the *Oracle Utilities Energy Information Platform Installation and Configuration Guide* for more information about setting a default Interval Data Database.
- Customer Database: Specifies that interval data stored in the Oracle Utilities Data Repository be used. When this button is selected, a drop-down list appears listing all available interval data header tables. The default table is the Channel Cut Header (LSCHANNELCUTHEADER) table.

Export Records Overwritten by SAVE to File: This option saves interval data cuts from the Interval Database to an export file before they are overwritten by new cuts created by a Rules Language SAVE Statement. The full path and name of the file (including a valid extension) must be specified.

This option appends new cuts to the same file without overwriting previously exported cuts.

Interval Data Options

The Interval Data Options tab specifies how interval data is loaded and processed by the system.

Exclude intervals with quality less than: Specify a status code level that the interval data must meet or exceed in order to be included in the calculations. All interval values with a code less than your selection will be ignored by the programs.

The codes are listed in order of decreasing quality—alpha codes generally indicate that the data is acceptable; numeric codes indicate that the data is suspect and should be corrected..

Status Code	Classification of interval data
(blank)	Normal
А	Normal, alternate-recorded (e.g., hand-entered)
J	Data inserted by Oracle Utilities Load Analysis to correct outage
L	Default for data modified by Oracle Utilities Load Analysis Load Data Editor
М	Splice peak interval (estimated value)
Ν	Interruptible or curtailable load
Р	Inserted outage
Q	Corrected outage
Х	Cuts resulting from merging invalid data or from unrecognized status codes
Y	Reserved
1	Uncorrected outage
2	Non-normal (usually timing-pulse defects)

Status Code	Classification of interval data
5	Aggregated interval used in rolling format with partially missing or unavailable data
7	Marged, aggregated, or transformed interval with partially missing data
9	Missing

Day Start: Specify the time that your facility considers the beginning of the day—8:00 am or midnight. This setting pertains to the ROUNDATE Rules Language function.

Use in all day calculations: Check this box if you want the Day Start time to apply to all date calculations that round to a full day or higher.

Use interval end time when displaying time of the interval: Specifies whether the startor end-times of intervals are displayed for the MAXDATE values in INTDVALUE and INTDTOUVALUE functions. If checked, the end-time is displayed. If unchecked, the starttime is displayed (the default).

Add Fall Daylight Savings Time value to Energy requests: Because previous versions of the Oracle Utilities Data Repository stored energy in a 24-hour format, the system had to compensate for the extra hour of interval data that is left over on the day when the clocks are turned back for Daylight Savings Time. To do this, the system automatically takes each account's interval data values for the two DST hours (2:00 AM in the US) and averages them together for a single hour. This option enables you to specify how Oracle Utilities Billing Component (or other Oracle Utilities products) handles the "leftover" hour when calculating energy from interval data. If this option is checked, the system doubles the averaged value. If the option is unchecked, it uses just the single, averaged value. This option should only be used if the DST Participant flag is set to "A" in your interval data.

Version 3.70 (and above) can store interval data in 25-hour format (for the day when DST ends). Oracle recommends this option remain **unchecked** when using version 3.70 or above. Enabling this option in version 3.70 or above can result in incorrect energy calculations.

Export Validation Flag: Controls the settings of the Validate_Record_Flag upon export. This can be set to one of the following:

- Valid (default): Sets all Validate_Record_Flags of each cut within the exported file to "N", ignoring the Validation status of the requested cuts.
- **Invalid**: Sets all Validate_Record_Flags of each cut within the exported file to "Y", effectively ignoring the Validation status of the requested cuts.
- Use Cut's Status: Sets the Validate_Record_Flag to either "Y" or "N" depending upon the combination of validation flags that are current in the cut when exporting takes place. If either the Merge flag or the Internal_Validation flag are "Y", then the Validate_Record_Flag in the exported cut is set to "N". If both are set to "N" then the Validate_Record_Flag is set to "Y".

Interval Data Merge

The Interval Data Merge tab allows you to specific how interval data cuts are merged when using the INTDJOIN Rules Language function.

Note: The Interval Data Merge options tab only appears if you include the INTD_NEW_JOIN parameter in the configuration file. See the *Oracle Utilities Energy Information Platform Installation and Configuration Guide* for more information.

Check Interval Data Validation before Merge: Check this checkbox to cause the program to check cuts' merge validation flag before merging. The default is not to check.

Interval Data Merge Selection Criterion: Choose a criterion for merging overlapping interval cuts (i.e., a rule how to merge two cuts into one). There are four criteria for merge:

- Most Recent Start: Pick the interval from the cut that starts later.
- **Best Status:** Pick the interval from the cut with a better status code. If the intervals have the same status code, the values are averaged.
- Average Value: Pick the time-weighted average of the overlapping intervals. The status code of the averaged interval will be the worse of the overlapping intervals.
- Maximum Value: Pick the interval from the cut with a larger value.
- **Time Stamp**: Pick the interval from the cut with the later Timestamp.

The default criterion is Most Recent Start.

Error Handling

The Error Handling tab specifies how errors are handled by the system.

Display error messages: If checked, the program will display the number of errors (if any) it encountered during the job run.

Stop analysis after ## errors: The number of errors to allow when running an analysis or bill.

On Rules Language Interval Data Error: Use this option to specify how the programs handle interval data problems encountered while the rate schedule is running:

- Stop with Error. Stop processing in any mode.
- Log Message. Complete processing; include warning message in error log, but not in report.
- Continue. Complete processing; do not issue any messages.
- Issue Warning Message. In the Automatic Billing mode, stop processing the bill. In the Automatic or Approval Required modes, complete processing, but issue a warning message in the bill report.
- Issue Information Message. Complete processing; include informational message in report.

User Files

The User Files tab specifies where files created by the user are stored by the system.

Default User Directory: If there is a value in this field it will override the USERDIR setting in the configuration file (after the database is opened). Files put in the user directory before the database is opened - such as .log files - will still be placed in the USERDIR directory.

Use last save/open path as default for next save/open? - If this checkbox is checked, the path used in the last open or save operation will be the default path for the next open and save operation, for the duration of the application's run. Each time an application starts it will use the Default User Directory/USERDIR path in the first open or save.

Browsing and Viewing Account Data

From time to time, you might need to verify account data in the Oracle Utilities Data Repository. This can include checking Bill History records, or the specific rate forms associated with a given account. Oracle Utilities applications include methods for viewing data using Data Manager's Browser and Account Centric View. Each of these is described below.

How to Browse Account Data:

1. Select File->Browse Customer/Account(s)...

The View Customer/Account(s) Inputs dialog box appears.

2. Complete the dialog as follows:

Select By: Choose either Account or Customer.

Select: Select the accounts or customers of interest using one of the following options:

- **ID** Type the ID of the customer or account of interest.
- List Select the list of interest. (See Chapter Eleven in the *Data Manager User's Guide* for information about creating lists.)
- All View all customers or accounts in the database.
- File Select a file containing a list of customer/account IDs (*.IDS), a list file (*.lst), an account query file (*.qra), or a customer query file (*.qrc).
- 3. Click **OK**. The **Browse Customer/Account(s)** window opens, with just the selected customer or account records displayed.

Additional information about using the Browser can be found in **Chapter Six**: **Browsing Data** in the *Data Manager User's Guide*.

Viewing Account Data:

1. Select File->View->Account.

The Enter Account ID window appears.

2. Enter the ID for the account you wish to view, and click OK.

The **View Account** window appears, with information about the selected account displayed. The View has two sections. The top section displays the "header" or "indicative" data. This data remains on the screen for easy reference while you work with the account information displayed in the various tabs below. For instance, if you're on the phone with a customer researching his or her bills, the customer's name is always visible at the top of the screen.

Each tab in the lower portion of the screen is devoted to a particular category of information. To view the contents of a tab page, simply click on its tab.

The tabs are organized in four columns. The fields displayed on each tab page are detailed in the last section of this chapter.

Note: The specific tabs and fields in your company's version of the Account-Centric View may differ from those shown in the illustration below.

Additional information about using the Account Centric View can be found in **Chapter Five**: **The Account-Centric View** in the *Data Manager User's Guide*.

Report Options

Report options allow users to customize the contents of a report, including the report presentation and output, the print detail level, problem determination options, and the appearance of the Bill Calculation Results section of reports.

Note: Changes to report options as described in this section apply only to the report currently being run.

Users access the Report Options via tabs at the top of the Report Options dialog. Clicking on these tabs allows users to navigate between types of report options, including:

- General Options
- Print Detail Options
- Problem Determination Options
- Bill Calculation Results Columns Options

How to set and save report options:

- 1. Click the **Report Options** button in the input dialog box for the report you're creating. The **Report Options** dialog appears.
- 2. Make any appropriate changes on the **General**, **Print Detail**, **Problem Determination**, and **Bill Calculation Results Columns** tabs.

Note: Not all report options are available for all reports. If an option is not available, it is greyed out.

3. Click **OK** to save the changes. To close the Report Options dialog without saving changes, click **Cancel**.

General Options

The General tab allows users to set presentation and output options for a report.

Report Titles

To add optional titles to a report, enter the title in one of the three optional title fields.

Saving Reports to Files

To write the report to a file, check the "Write report directly to File" check box and specify the path and filename for the file. Use the "Browse" button to locate an existing file. To display the report also, check the "Also Display Report" checkbox.

Other Options

- To disable graphing for the report, check the "Disable graphing of data" checkbox.
- To display only summaries for the report, check the "Display summaries only" checkbox.
- To keep the report data for CSV/XML exporting, check the "Keep data" checkbox.

Print Detail Options

The Print Detail tab allow users to specify the level of detail included in both a bill report and transaction record. The information computed and available for reporting is determined by the statements used in the applicable rate form. The **Print Detail** tab enables you to specify how much of that available data is included in the reports and transaction records.

Print Detail Options

Default: This option means the program will use the **Print Detail** setting normally applied to the account (via the Account, Rate Code, Rate Schedule, or Global options specified). Alternately, you can override the usual setting for just this job by selecting one of the following:

None: This option displays effective revenue only.

Normal Detail: This option displays effective revenue, plus any charges assigned to a revenue identifier and any values assigned to a Report Statement in the applicable rate form.

All Detail: This option displays effective revenue, plus revenue identifiers, plus the values associated with the Rules Language Label and Report statements in the rate form.

The table below details how these options apply to specific components of a report and transaction record.

Report Component	None	Normal	All
Customer/Account Detail	Х	Х	Х
Input Values		Х	Х
LABELed Identifier Values			Х
Simple Report Values		Х	Х
Compound Report Values		Х	Х

Print Detail Items

To override the **Print Detail Options** setting for specific components of a bill report and transaction record, select the specific options for each component in the **Print Detail Items** section of the dialog. For each report component type, select one of the following:

- **On** Include the component in the report and transaction record.
- Off Exclude the component from the report and transaction record.
- Print Detail Option Apply the setting specified under Print Detail Options. The specific
 manner in which these settings affect individual report components is detailed in the table
 above. For example, if you had selected "None" under Print Detail Options, and selected
 Print Detail Option here for Input Values, the input values would not appear in the report.

Following is a brief description of each of the report components.

Customer/Account Detail. Date activated, billing mode, number of days specified for the eligibility pre- and post-windows.

Input values. This option reports the parameters specified for the bill calculations: bill start and end date; date that the account's meter was scheduled to be read; rate code applied to the account; number of days in bill period, and the bill month.

LABELed Identifier Values. This option reports the any identifier values and text strings specified using a LABEL Statement in the rate form. LABEL statements are typically used to substitute meaningful labels for bill determinant names or other brief and sometimes-cryptic identifiers (e.g., LABEL LF "LOAD FACTOR" displays LOAD FACTOR and its value in the report). They are often used for column headings or report subtitles.

Note: If a report component type is designated to appear in a report, and it is assigned a name using a LABEL Statement, its values will automatically appear in the report, with the new label. In other words, it is not necessary in that case to apply the **LABELED identifier values** option to get the label and value to appear. For example, the applicable rate form might have the statement LABEL \$EFFECTIVE_REVENUE "Total Charges". Because Effective Revenue is automatically included in all report types, "Total Charges" will appear, no matter what print details options you choose.

Simple report values. This option reports any values that were assigned to an identifier using a REPORT Statement in the rate form. REPORT statements are typically used to report values of interest that are calculated and/or drawn from the database, such as peak times.

Compound report values. This option reports any values associated with a stem identifier using a REPORT Statement in the rate form.

Problem Determination Options

The Problem Determination tab allows users to specify the level of problem determination detail included in both a bill report and a transaction record.

When problems occur during the processing of a bill, error messages and other information useful in determining the cause of the problem are created. The **Problem Determination tab** option enables you to specify how much of that data is included in the reports and transaction records.

Problem Determination Options

Show All Error Messages: This option reports all error messages that occur while processing the bill.

Show All Input Options: This option reports all input options used in processing the bill.

Show Bill records to Save (BillHistory, CSS, etc). This option includes the Bill History records in the Bill Report. *It is typically only used for testing*. If you turn this option off, the records are still output when you approve a bill, but they are not displayed or printed in the bill report.

Show Rate Schedule Used in Bill Calculation: This option includes the rate schedule used in processing the bill on the bill report.

Bill Calculation Results Columns Options

The Bill Calculation Results Columns tab allows users to specify the labels of the Bill Calculation Results section of a bill report.

The Bill Calculation Results section displays the number of billing units, the distribution of those billing units, the charge rate, and revenue for each revenue identifier used in a rate schedule.

Bill Calculation Results Columns Options

- To change one or more of the Bill Calculation labels, check the **Change Bill Calculation Labels** checkbox and edit the labels as appropriate.
- To omit one or more of the columns from the bill report (except the Revenue column), check the **Change Bill Calculation Labels** checkbox and delete the appropriate label.

Billing Units Label: The label for the Billing Units column. If blank, the column is omitted.

Distribution Label: The label for the Distribution column. If blank, the column is omitted.

Charge Rate Label: The label for the Charge Rate column. If blank, the column is omitted.

Revenue Label: The label for the Revenue column. This column cannot be omitted. If blank, the column label is Revenue.

Viewing and Printing Reports

One of the primary functions of Oracle Utilities applications is to generate reports. Each of the various analysis modules generate reports, and the programs also generate a number of other useful reports as well.

Once a report has been generated, it appears in an open report window on the application desktop. Once in an open report window, you can view and/or print the report. This section describes how to view and print reports generated using Oracle Utilities applications.

Viewing and Searching Reports

You can search for a specific word or words (or numbers) in an open report window using the **Find** option. The Find option (selected from the Edit Menu) allows you to search for a word or words in an open report window. When you select this option (or press **F3**), the Find dialog opens.

Enter the word or words you wish to find and click **OK**. To find the next instance of the word or words with the Find dialog still open, click **Find Next**. To find the previous instance of the word or words with the Find dialog still open, click **Find Previous**.

Once you've entered a word or words in the Find dialog, you can search by using the Find Next or Find Previous options from the Edit menu.

- To search for the next instance of the word or words last entered in the Find dialog, select the **Find Next** (or press **Shift-F3**) option.
- To find the previous instance of the word or words last entered in the Find dialog, select the **Find Previous** (or press **Ctrl-F3**) option.

Moving to a Specific Line in a Report

You can also jump to a specified line number within an open report window by using the Go to option. The Go to option (selected from the Edit Menu) allows you to move to a specific line in an open report window. When you select this option (or press **Ctrl-G**), the Go To tab on the Find dialog opens.

Enter the line number in the report that you wish to move to and click OK.

Changing the Appearance of Reports

You can also change the appearance of the text in an open report window using the Font option (from the Edit menu). When you select the Font option, the Font dialog opens.

To change the font in the report window, select a new Font, Style, and Size and click **OK**. The text in the report window will display and print the font/style/size selected.

Printing Reports

You can also print reports using the Print option (from the File menu). When you select the Print option, the Print dialog opens.

To print the report, complete the Print dialog as appropriate:

- Ignore page breaks: Check this to ignore the page breaks in the report.
- Page width in characters: Enter the desired width of the report.
- Display line numbers: Check this to include line numbers on the report.

Once you've completed the dialog, click **OK**. A standard Windows Print dialog will open, allowing to set any desired print options.

Creating Graphs

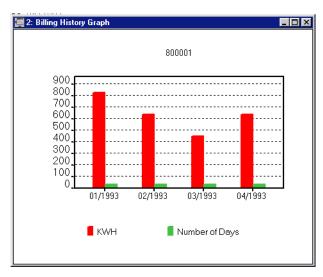
You can also create graphs from data in open report windows.

How to Create a Graph:

- 1. Select the Graph option from the View Menu (available only when an open report window is displayed), the Create Graph dialog opens.
- 2. Select an Account ID you wish to graph from the Select Account ID to Graph box. A list of available rows to graph will appear in the Select Rows to Graph box.
- 3. Select a row to include on the graph and click Add. The selected row will appear in the Pairs to Graph box. Repeat this step for each Account ID/row pair you wish to include in the graph.

To remove a pair, select it and click **Remove**.

4. Enter an optional title for the graph in the Title box and click OK. The graph will appear in a window.



- 5. To change the view of the graph, select from the options in the View menu.
 - The Style option allows you to select from bar graph style (as above) or line graph style.
 - The Background Color option allows you select the background color for the graph (White, Gray, Dark Gray, or Black).

Using Online Help

Oracle Utilities applications provide browser-based online help.

How to open online help:

- 1. Select **Help Contents** from the Help menu. The online help opens in a browser window.
- 2. Locate the topic you need help about via the Contents tab, Index tab, or Search tab.
 - The Contents tab allows users to expand/collapse sections of the table of contents as needed to find a particular topic. Click on the book icons (and) to open/close headings. Click on the topic icon () to open it.
 - The **Index** tab allows the user to browse an index for the online help. Click on the index entry for the topic to open it.
 - The **Search** tab allows the user to search the online help for specific words. Enter the word(s) for the search in the text box and click **Go!** The search results appear beneath the text box. Click on the topic to open it.
- 3. The selected topic will appear in the right pane of the online help window.

Help Icons

A number of icons appear along the top of the online help window. These icons are used for navigating the online help and other functions. These icons perform the following functions:

lcon	Description
	Show Navigation : Open the navigation frame. Used after opening a single help topic.
^	Previous : Display the previous help topic.
V	Next : Display the next help topic.
¢	Show in Contents : Expand the Contents tab to display the current topic.
M	E-mail: Send email to Customer Support.
8	Print : Print the current topic.
J	Bookmark : Save the current topic as an Internet Explorer Favorite

Context-Sensitive Help

Users can also get online help based on a specific function or screen. This is referred to as context-sensitive help.

How to open context-sensitive help:

- 1. Open the function or screen you wish to find help about.
- 2. Click the Help button in the Toolbar or press F1.
- 3. An online help window opens displaying the corresponding topic.

Shortcut Tips

Account ID Hyperlinks

Oracle Utilities Billing Component and Oracle Utilities Rate Management includes a convenient and time-saving shortcut for "jumping" from an open report to another module, while zeroing in on information about an account of interest.

How to use the account shortcut:

- 1. Highlight the ID of an account of interest in an open report window. If the report was generated based on a customer/account list, you can also select the list name.
- 2. Right-click in the report window, and select the desired option from the menu that appears.

When the next dialog opens, the ID is already supplied.

Copying Text Between Windows

This is another timesaving tip that enables you to copy information from one text entry field and paste it into another, saving you the effort of retyping the data and ensuring that it is the same. It is especially useful for Account IDs. The fields can be in the same or different windows.

How to copy text from one data entry field and paste it into another:

1. Highlight the desired text, and *with the I-beam cursor still positioned in the text field*, click the *right* mouse button.

A menu appears.

2. Select Copy.

The text is now saved to the Clipboard.

- 3. Go to the window containing the field in which you wish to paste the text.
- 4. Click the cursor in the desired field. Without moving the cursor out of the field, click the *right* mouse button. When the menu appears, click **Paste**. The text appears in the field.

Alternate approach:

Here is another method that does the same thing, but with the keyboard instead of the mouse.

- 1. Highlight the desired text in a text entry field. Do not move the cursor out of the text field.
- 2. Press CTRL+INSERT (or CTRL+C) on your keyboard.
- 3. Go to the window containing the field in which you wish to paste the text.
- 4. Click the cursor in the desired field. Without moving the cursor out of the field, press SHIFT+INSERT (or CTRL+V) on your keyboard.

Saving and Applying Settings for Dialog Boxes

This section describes a very convenient and time-saving feature that enables you to save input parameters for tasks you perform frequently. Specifically, you can save your selections for account/customer and date(s). To use this feature, complete an input dialog box as you would normally before running a billing, analysis, or reporting module, save the settings with a name of your choosing, and recall them the next time you want to perform the same or a similar task.

How to save settings:

- 1. With the desired setting specified in an input dialog box, *right*-click in any blank area of the dialog. The **Save/Restore** dialog box appears.
- 2. Enter a name and optional descriptive note for your settings, and click Save.

The settings are now saved to the database.

How to import/export settings:

To export:

- 1. Select the report settings and click **Export**. The Select File for Dialog Settings Report dialog opens.
- 2. Navigate to the desired directory and click **Save**. The report settings are exported in XML format, and can now be imported for use with other dialogs.

To Import:

- 1. Click Import. The Select File for Dialog Settings Report dialog opens.
- Select the desired file and click **Open**. The report settings are now available for use with the current dialog.

How to apply the settings:

- 1. Open the dialog box for which you've saved settings. *Right*-click in any blank area of the dialog. The **Save/Restore** dialog appears.
- 2. Select the desired settings and click Restore.

The dialog is updated with the settings. You can use them as is, or modify them before running the job.

How to delete the settings from the database:

The following instructions explain how to delete unwanted settings, so that they no longer appear in the pop-up menu. You can delete reports by highlighting the report settings you wish to delete and clicking **Delete** or by deleting the settings from the Data Repository using the Browser. To delete report settings using the Browser, using the following procedure.

- 1. Select File->Browse->Customer Database. The Browser opens.
- 2. Click on the plus sign that appears to the left of the **Report Settings** table icon (you may have to scroll down the tree to bring that table icon into view).

A list of the Report Setting records that are currently stored in the database appears under the table icon. Each report setting record is identified by a combination of three IDs: the logon ID of the user that saved the setting, the internal ID that identifies the dialog box to the system, and the name that the user assigned to the settings when he/she saved them.

- 3. Highlight the icon for the record you wish to delete.
- 4. Select Edit->Delete from the menu bar.

A message box appears, asking you to confirm that you wish to delete the record. Click **OK** to delete the record. Click **Cancel** to keep it.

Important Note

Before you can use Oracle Utilities Rate Management or any of its functions, you must first make sure that appropriate data and records have been created in the Oracle Utilities Data Repository. The instructions in this manual assume that these records exist. For more information about creating, updating, or editing records in the Oracle Utilities Data Repository, please refer to the *Data Manager User's Guide*.

International and Multiple Currency Support

This section outlines international and multiple currency support in the Oracle Utilities Energy Information Platform, including:

- Locales and Languages
- Date and Numeric Presentation
- Currency Presentation
- Multiple Currency Support
- File Formats
- Database Support

Locales and Languages

Two fundamental concepts underlying international support in Oracle Utilities applications are **languages and locales**. Languages determine the specific language in which text labels and controls of an application appear. Locales determine the specific region or country in which the user is working. Specifically, locales are used to specify display and input formatting for:

- Date/time and numeric presentation, and
- Currency presentation

How a user selects a language and/or locale is determined by the type of application being used.

Web-enabled Products

For web-enabled products, a user's locale and language are selected from the **Locales** tab of the **Set Preferences** screen. The selected locale and language are stored in the user's security properties. The available locales on this screen are specified in the LOCALES.CFG.XML configuration file (see **Chapter 2**: **Configuration Files** in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information). Locales included in the LOCALES.CFG.XML file must also be installed on the web server and be accessible from the Regional Settings Control Panel. If a selected locale is not installed on the web server, currency formatting and presentation may be incorrect.

If a user does not select a locale (or selects a locale of "None"), the default locale is the Server System Locale (defined by the operating system installed on the web server). Oracle Utilities recommends that all users specify a locale before using internationalized applications.

Client/Server Products

For client/server products, the user's locale is determined by the Regional Settings of the client and/or application server machine.

Languages

The language for client/server products is specified using a command line switch and/or a parameter in the LODESTAR.CFG file. See **Oracle Utilities Application Command Line Parameters** on page 4-11 in the Oracle Utilities Energy Information Platform Installation Guide for more information about command line parameters. See **LODESTAR.CFG** on page 2-2 in the Oracle Utilities Energy Information Platform Configuration Guide for more information about the LODESTAR.CFG file. At this time, available languages include English, French, German, and Italian.

Reports

For client/server applications, the locale for reports is determined by the Regional Settings of the machine on which the report is run.

For web-enabled applications, the locale for reports is based on the Server System Locale (defined by the operating system installed on the web server)

Languages

For client/server applications, the language that appears on reports is determined by the language of the application that generated the report, specified either by a command line parameter or a configuration file parameter.

For web-enabled applications, the language is specified by the Regional Settings of the machine on which the report is run, unless overridden by the LANGUAGE parameter in the LODESTAR.CFG file.

Date and Numeric Presentation

The display and input of dates and numbers is based on the selected locale.

Web-enabled products

Display formatting of both numbers and date/times is based on the user's selected locale.

Copy, cut, and paste operations are supported for all input controls. Required fields are identified by asterisks. Null values are represented by blank (empty) controls. Moving the mouse pointer over an input area displays sample formatting for that field.

Number input controls only accept formatting based on the user's selected locale. The only allowable characters include digits, decimal separator, and minus sign. Any other characters are filtered from input.

Date input controls only accept formatting based on the user's selected locale. Dates can either be keyed in or selected from a pop-up calendar control. All times are keyed in and based on 24 hour format (no AM or PM indicator).

Input validation occurs upon data entry.

Client/Server Products

Formatting for numbers and date/times is based on the locale determined by the regional settings of the client and/or application server machine. Date/time formatting can be overridden from the General Options tab of the Default Options dialog.

Reports

Display formatting of both numbers and date/times for reports is based on the Server System Locale on the machine on which the reports are run.

Currency Presentation

Currency information is stored in the LSCurrency table in the Oracle Utilities Data Repository. This table contains one or more currencies, each defined by a currency code, currency symbol, and formatting rules (such as the number of decimal places). Currency codes in this table use ISO-4217 codes. The LSCurrency table also indicates the Default currency for the database. See **LSCurrency** on page 3-3 in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information about setting up the LSCurrency table.

Note: Although records in the LSCurrency table are not required, Oracle Utilities strongly recommends that at least one record with all properties specified be created and set as "Default". This will ensure consistent display of currency information.

Currency Presentation in Oracle Utilities Receivables Component and Oracle Utilities Quotations Management

Currency input and display is identical to that for numbers with two exceptions:

- A currency indicator is also displayed next to currency input controls and currency displays. The specific currency symbol displayed and the manner in which currency is formatted are determined in the following order:
 - a. The currency associated with the account being viewed (from the LSCurrency field in the Account table).
 - b. The default currency in the LSCurrency table. If there is no default currency, the first record in the LSCurrency table (sorted alpha-numerically by Currency Code).
 - b. If the LSCurrency table is not present or does not contain any records, the currency and formatting of the Server System Locale (defined by the operating system installed on the web server), specified in the HKEY_USERS\.DEFAULT\Control Panel\International key in the Windows Registry on the web server.
- Currency formatting rules for the user's selected locale are overridden if specific formatting
 rules for the currency are stored in the LSCurrency table. Typically, the only formatting rules
 that would be overridden at the currency level would be the ISO code, symbol, and number
 of decimal places. This applies to Oracle Utilities Receivables Component reports as well,
 except that the initial locale formatting rules come from the regional settings of the machine
 on which the report is run.

Currency Presentation in Other Web-enabled Products

Currently, other web-enabled products do not require input of currency values.

Display of currencies is based on the formatting of the selected locale and of the default currency in the database (currency specific formatting always overrides locale specific formatting).

Enabling Display of International Currency Symbols

Display of international currency symbols requires the appropriate Encoding option is selected on Internet Explorer.

How to select encoding options:

- 1. Select View->Encoding from the Internet Explorer menu bar.
- Select the appropriate option from the list. For example, to enable displaying of the Euro symbol and other Western European currency symbols, select the Western European (Windows) option.

Currency Presentation in Client/Server Products

Client/server products do not require input of currency values.

Display of currencies is based on the formatting of the client machine's regional settings and of the default currency in the database. Currency specific formatting always overrides locale specific formatting. If the default currency in the database does not specify any formatting, the currency symbol is used for formatting. If the currency table does not exist or does not contain any records then the default currency is determined by the Regional Settings on the client/server machine. This applies to reports as well.

Multiple Currency Support

Multiple Currency Support allows for accounts with different associated currencies. This is accomplished through the presence of the Currency Code column on the Account, Journal Account, and Checking Account tables in the Oracle Utilities Data Repository. This column references records in the LSCurrency table

Multiple Currency and Oracle Utilities Receivables Component

All input screens which have amount fields on them indicate what currency type is expected as input.

All elements that represent a currency in Oracle Utilities Receivables Component XML structures have a CURRENCY attribute that indicates the corresponding currency type for the amount. The string values used for this attribute are the same as the Currency Code values in the LSCurrency table. On output, the CURRENCY attribute is set for the account as specified in the database. If the account's currency type is not specified in the database, the default currency is used.

A CURRENCY attribute (using the standard stem.tail notation) is supported for Oracle Utilities Receivables Component transaction identifiers to specify the currency type for the account.

On input, the CURRENCY attribute of all Oracle Utilities Receivables Component transactions is checked against the currency value of the account against which the transaction is being posted using the following rules:

- 1. If a currency type is specified for the account in the database, the transaction must indicate the same currency type or it is an error.
- 2. If a currency type is not specified for the account in the database, the transaction must indicate either no specific currency type or the default currency type for the database or it is an error.

All transactions that involve two or more accounts (such as Payment and Balance Transfers) validate that the currency types are the same for each account (no currency translation will occur). The credit/debit account pairs for each journal translation record are validated to ensure that they both have the same currency type. Only journal translation records that have credit/debit accounts with the same currency type as the account against which the transaction is being posted are used. Additional currency validations occur for payment files and refund checks.

Multiple Currency and Oracle Utilities Receivables Component Reports

Where applicable, Oracle Utilities Receivables Component reports are grouped by Currency Code.

Multiple Currency and Other Oracle Utilities Products

Oracle Utilities Billing Component, Oracle Utilities Rate Management and Data Manager reports display the Currency Code associated with each account where applicable. Reports that contain multiple currency types do not include the Summary Results page.

In Oracle Utilities Rate Management - Revenue Forecasting, the default currency type is used for all presentation of currency amounts, regardless of whether or not a specific currency has been indicated in the database for any accounts.

File Formats

Input/Output File Formats

Numbers and date/times in input and output files (such as files used with the PLIMPORT program) are independent from locale settings.

Non-English characters are supported in input/output files.

XML Formats

All dates, times, and numbers contained in XML files are represented using the standard formatting rules as defined by the W3C XML Schema Recommendation. For backward compatibility, previously accepted formats for dates and times will continue to be accepted on input, however, all output will use the XML Schema representation.

Note: XML files created by the SAVE TO XML Rules Language statement are an exception. The date, time, and number formats in Rules Language generated XML files are based on the Rules Language configuration used to create them.

Non-English characters are supported in XML files

Database Support

In addition to the LSCurrency table and related columns in the Account, Journal Account, and Checking Account tables, database support for internationalization includes the addition of the COUNTRY column in the Address table and the change from ZIP Code to Postal Code on user interfaces.

Oracle Utilities Rate Management Documentation Overview

In addition to the Oracle Utilities Rate Management User's Guide (this book), Oracle Utilities Rate Management also comes with a number of other manuals and documents. These are described briefly below.

Oracle Utilities Energy Information Platform User' Guide

The Oracle Utilities Energy Information Platform User's Guide contains describes how you work with the Oracle Utilities Energy Information Platform web -user interface.

Data Manager User's Guide

Data Manager is the tool you use to view, edit, and update records in the Oracle Utilities Data Repository. The *Data Manager User's Guide* explains how to use Data Manager to view and maintain data in the Oracle Utilities Data Repository.

Oracle Utilities Rules Language

The Oracle Utilities Rules Language is a powerful command language that defines business rules and specific items such as rate tariffs. The Oracle Utilities Rules Language User's Guide and Oracle Utilities Rules Language Reference Guide describe the Oracle Utilities Rules Language and how it is used with Oracle Utilities products.

Oracle Utilities Energy Information Platform Installation Guide

The Oracle Utilities Energy Information Platform Installation Guide contains installation information related to the Oracle Utilities Energy Information Platform.

Oracle Utilities Energy Information Platform Configuration Guide

The Oracle Utilities Energy Information Platform Configuration Guide contains configuration and system administration information related to the Oracle Utilities Energy Information Platform.

Chapter 2

Creating Bill Frequency Tables, Reports, and Revenue Analyses

This chapter explains how to create and analyze Bill Frequency Tables using tools provided by Oracle Utilities Rate Management and Data Manager. Once you have created a Bill Frequency Table, you can then generate revenue reports by applying a selected rate form to the usage data summarized in the Bill Frequency Table. This chapter includes:

- Purpose of Bill Frequency Tables and Analysis
- Creating a New Blocking
- Creating a Bill Frequency Table
- Reporting or Graphing a Bill Frequency Table
- Creating a Bill Frequency Revenue Analysis

Purpose of Bill Frequency Tables and Analysis

Bill Frequency Tables are used to summarize billing determinant data for a user-defined group of customers. You can then apply rate schedules to these tables for revenue analysis (using Oracle Utilities Rate Management) or revenue forecasting (using Oracle Utilities Rate Management - Revenue Forecasting).

Prior to running the revenue analysis or forecast, you may wish to analyze the contents of the Bill Frequency Table itself using Oracle Utilities Rate Management's Bill Frequency Analysis. This feature displays the contents of the table in tabular and/or graph format. Bill Frequency can also be run in batch mode using a command line program. For more information, see **Bill Frequency** on page B-10 of **Appendix B: Setting Up Oracle Utilities Rate Management to run in Batch Mode**.

Required Inputs for Creating Bill Frequency Tables

Minimally, Bill Frequency Table creation requires a list of the customers that you wish to summarize data for, bill determinant values for the customers for the desired test period, and at least one Bill Determinant/Blocking pair.

Blockings are created separately from Bill Frequency tables and are stored in the Oracle Utilities Data Repository. Blockings may be subsequently edited after initial creation. Bill Frequency tables cannot be edited after creation. Both Blockings and Bill Frequency tables may be deleted from the database. Instructions for creating Blockings and Bill Frequency tables are provided in this chapter.

Bill Frequency Table Description

A Bill Frequency Table is a summary of billing determinant data for a customer list over a range of months. For each month, data for one or more determinants is grouped into Blockings which are in turn (optionally) grouped by one or more rate code groups.

Blockings

Data for each determinant of interest is collected into "bins" or "blocks" which each represent a continuous range of possible billing determinant values. A series of contiguous blocks comprises a "blocking" which serves to partition the entire range of possible billing determinant values. Each determinant summarized by the Bill Frequency Table is paired with a selected blocking to form a Determinant/Block pair (each determinant may have a different blocking). Each block maintains a customer count and a total value. When a customer's billing determinant value falls within a given block the customer count or the block is incremented and the billing determinant value is added to the block's total value. The result is a table of counts and total usage for each range in the blocking.

Rate Code Groups

The data in a Bill Frequency Table can be further separated out into one or more Rate Code Groups. A Rate Code Group is simply a list of one or more rate codes. The default Rate Code Group for a Bill Frequency Table consists of the set of all rate codes assigned to customers in the analysis population. A Rate Code Group is identified by the first rate code in the list. Within a single Bill Frequency Table, no two Rate Code Groups may contain the same rate code. A customer's billing determinant data will be included within a Rate Code Group only if that customer's assigned rate code is in the Rate Code Group.

Bill Frequency Table Files

Each Bill Frequency Table is stored in a separate ASCII text file. These files are located in the RCDATA directory and have a .BFT extension. These files are automatically created by the tools provided by Oracle Utilities Rate Management and should not be manually edited under normal circumstances.

Creating a New Blocking

When you create a blocking, you can specify the high and low values that define each individual block. Or, if all or a portion of the blocking consists of a series of contiguous, equal-size blocks, the software gives you a shortcut—in that case, you can supply the high and low values that define the range covered by the series of equal-sized blocks, and then the value of the block (called the "**Step**" value).

How to create a new blocking:

- 1. Go to the Data Manager desktop. If you are at the Oracle Utilities Rate Management desktop, you can open Data Manager by selecting **Tools->Data Manager**.
- 2. At the Data Manager desktop, select File->Setup->Blocking Tables.

The **Open Blocking** dialog box appears.

3. Click New.

The **Blocking** dialog box appears.

4. Under **Values**, enter the Low and High values for the current block (or the range of contiguous, equal-size blocks). The High value must be greater than the Low value for each block, except for the *last* block in the blocking, which may be zero (a High value of zero indicates infinity).

You can specify negative numbers for the low and high values that define a block (however, these are used only in the Billing Impact Frequency report in Customer Impact). If you change your mind and want to remove a minus sign, simply type a + sign in the Values field for that value.

5. Enter a **Step** value for the block. If you are defining each block individually, then the Step value must equal the difference between the High and Low values. If you are using the step feature to specify a set of contiguous, equal-size blocks, the Step value must evenly divide into the difference between the High and Low values. If you are specifying the last block with a High value of 0, the Step value should be 0, too.

Note: If any usage values fall outside of the specified blockings (either at the high end if you did not specify 0 for the High value in the last block, or at the low end if there are negative values), the program automatically creates an "additional" blocking at that end when the program creates the Bill Frequency Table.

- Click Add to insert the block(s) into the Blocking Contents list box. A block is automatically
 inserted into its proper position in the list box based on its Low and High values.
- Repeat Steps 3 through 6 to add any other blocks necessary to complete the definition of the Blocking. Make sure that the High values match the Low values for consecutive blocks.
- 8. Click **OK** to save the new blocking in the Customer Database. The **Save Blocking Table As** dialog appears.
- 9. Enter a name and comments for the blocking, and click OK.

You can also open an existing blocking file.

How to Open an Existing Blocking:

1. At the Data Manager desktop, select File->Setup->Blocking Tables.

The **Open Blocking** dialog box appears.

 Select the desired blocking and click **Open**. You can also import a Common Blocking file by clicking **Import** and selecting the appropriate Common Blocking file. The imported blocking file then appears in the **Open Blocking** dialog.

Creating a Bill Frequency Table

Once you have created and stored the blocking(s), you are ready to create the Bill Frequency Table.

Note: You can have a different blocking for each determinant in the Bill Frequency Table.

How to create a Bill Frequency Table:

1. At the Oracle Utilities Rate Management desktop, select Analysis->Bill Frequency->Create.

The Create Bill Frequency Table dialog box appears.

- 2. Select either Account or Customer in the Select By box.
- 3. Select the accounts or customers of interest using one of the following options:
 - **ID:** Type the ID of the account or customer of interest.
 - List: Select the list that contains the IDs of the customers or accounts whose usage you want to use as the basis for the Bill Frequency Table. If the contents of the list may have changed since the last time that the query associated with it was run, check **Refresh list before using**. This option updates the list for this job and saves the new version of the list to the database, replacing the old version.
 - All: Select this option to include all customers or accounts that are in the Customer Database.
 - File Select a file containing a list of customer/account IDs (*.IDS), a list file (*.lst), an account query file (*.qra), or a customer query file (*.qrc).
- 4. Specify the Test Period. Enter a range of months that defines the test period.
- 5. Select the Determinant/Blocking. In the Determinant list box, highlight a desired billing determinant. Then, in the Blocking list box, highlight the Blocking you wish to apply to the selected determinant. Click Add to put the results in the Determinant/Block Pairs list box. Repeat for each billing determinant you want to include in the Bill Frequency Table.
- 6. Click **Advanced** if you want to break down the Bill Frequency Table by Rate Code Groups. If so, go to Step 4. If not, click **OK** and go to Step 6. (If you do not apply the Advanced option, Oracle Utilities Rate Management will automatically default to a single Rate Code Group, which will consist of all Rate Codes assigned to all customers in the Bill Frequency Table.)
- 7. If you clicked Advanced, the Advanced Create Bill Frequency Table dialog box (shown above) will appear. This dialog lets you summarize billing information in a Bill Frequency Table by Rate Code Group. This is useful when you are using a Bill Frequency Table to compute revenue for a rate schedule with statements dependent on a customer's rate code. Complete the box as follows:
 - Select a Rate Schedule in the **Rate Schedule** combo box. All Rate Codes for the selected Rate Schedule then appear in the Rate Codes list box.
 - Select one or more rate codes from the **Rate Codes** list box to define a single Rate Code Group (you must hold down the Shift key to highlight more than one rate code).
 - When you have highlighted all members of the group in the **Rate Codes** list box, click **Add.** They appear in the **Rate Code Groups** list box.
 - In the **Select First Rate Code** list box, highlight one code in the group. Oracle Utilities Rate Management will use this code to represent the group in later displays and reports, and more importantly will apply it to all customer data that falls within this group during the revenue analysis. If you do not explicitly highlight a code, the program uses the first one in the list by default.
 - Repeat the above four steps for each desired rate code group.

- 8. Click **OK** to accept the defined Rate Code Groups.
- 9. When you are satisfied with your options in the Create Bill Frequency Table dialog box, click **OK**. The system will prompt you for a name (up to 8 characters).

A Progress Indicator dialog appears and tracks the progress of the Bill Frequency Table creation. If you want to stop the process for some reason, click **Abort**.

At the end, the application creates a file with the extension .BFT and puts it in the LODESTAR\RCDATA directory (e.g., C:\LODESTAR\RCDATA\freqtab.bft). You can now examine and analyze the contents of the file by applying the Bill Frequency Analysis feature (described next).

Reporting or Graphing a Bill Frequency Table

This feature allows you to examine the contents of a Bill Frequency Table (.bft file). Specifically, it creates a multi-paged report, with each page showing the breakdown for one determinant, bill month, and (optionally) rate code group. Following the monthly values, the report shows the results for the entire period, broken down by Rate Code Group. Finally, the last page in the report displays the "grand total summary" for the entire test period for all customers in the table.

In addition to creating tabular reports, you can also graph data. See **How to create a graph:** on page 2-6 for more information.

How to create a report:

1. At the Oracle Utilities Rate Management desktop, select **Analysis->Bill Frequency-**>**Analysis**.

The Bill Frequency Analysis Inputs dialog box appears.

2. Complete the dialog as follows:

Bill Frequency Table: Select the desired Bill Frequency Table.

Test Period From/To: Specify the range of months that you want to report.

Report Options: Click this button to modify the report. In the dialog that appears, you can:

- Disable the monthly reports so that only the grand summary total is reported or graphed (check **Display summaries only**).
- Add up to three optional titles to appear at the top of the report.
- Write the report directly to a file (no display is produced).
- 3. In the Bill Frequency Analysis Inputs dialog, click Report.

The report window appears (unless you selected **Write report directly to file** in the **Report Options** dialog). The section **About the Bill Frequency Analysis Report Format** on page 2-8 explains each of the columns in the report.

You can now print or export the graph using options under the **File** menu. If you decide that you want to graph the data, select **View->Graph**. Go to step 4 in the next set of instructions.

How to create a graph:

This option not only allows you to create graphs of selected data from the Bill Frequency Table, but also automatically creates a tabular report in a minimized window.

 At the Oracle Utilities Rate Management desktop, select Analysis->Bill Frequency->Analysis.

The Bill Frequency Analysis Inputs dialog box appears.

2. Complete the dialog as follows:

Bill Frequency Table: Select the desired Bill Frequency Table.

Test Period From/To: Specify the range of months that you want to graph.

Report Options: Click this button to control the amount of data that is processed. Specifically, you can disable the monthly reports so that only the grand summary totals are processed. To do this, place a checkmark next to **Display summaries only**.

Note: Do *not* select either of the options **Disable graphing of data** or **Write report directly to file**. Be sure that **Keep data** *is checked*. If you add optional titles, only the first (Title 1) will appear on the graph.

3. In the Bill Frequency Analysis Input dialog, click Graph.

The Create Graph From Columns dialog appears.

4. Complete the dialog as follows.

Select x-axis column: Select a report column variable to serve as the x-axis (see the next section, *About the Bill Frequency Analysis Report Format*, for a description of the columns).

Select column: Select a report column variable to serve as the y-axis (see the next section, "About the Bill Frequency Analysis Report Format," for a description of the columns).

Select RC, Bill Month to Graph: Select a rate code group and bill month to graph.

Click the **Add** button to move the pair into the **Pairs to Graph** list box. You can select up to 12 pairs to include on one graph.

- 5. Enter an optional title for the graph, and click **OK** to close the dialog and create the graph and report.
- If desired, you can change the graph's background color by selecting View->Background Color. In addition, you can save the graph image in a .gif or .met file using the File->Save As option.

About the Bill Frequency Analysis Report Format

Here is a sample portion of the Bill Frequency Analysis Report, and an explanation of each of the columns in the report.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Upper End	#Bills	#Bills Acc	#Bills Rev	Block Determ	Det Accum	Det Accum Rev	Det Billed	Accum Price	Acc Price Rev
0	20	20	196	0	0	10,191,275	0	0	10,191,275
10,000	1	21	195	9,600	9,600	10,181,675	1,959,600	1,959,600	8,231,675
20,000	8	29	187	133,620	143,220	10,048,055	1,923,620	3,883,220	6,308,055
30,000	31	60	156	773,500	916,720	9,274,555	1,713,500	5,596,720	4,594,555
40,000	31	91	125	1,094,025	2,010,745	8,180,530	1,414,025	7,010,745	3,180,530
50,000	31	122	94	1,399,140	3,409,885	6,781,390	1,099,140	8,109,885	2,081,390
60,000	35	157	59	1,910,895	5,320,780	4,870,495	750,895	8,860,780	1,330,495
70,000	20	177	39	1,265,665	6,586,445	3,604,830	455,655	9,316,445	874,830
80,000	10	187	29	759,910	7,346,355	2,844,920	349,910	9,666,355	524,920
90,000	12	199	17	1,011,260	8,357,615	1,833,660	221,260	9,887,615	303,660
100,000	6	205	11	570,360	8,927,975	1,263,300	140,360	10,027,975	163,300
Addt'l	11	216	0	1,263,300	10,191,275	0	163,300	10,191,275	0

- 1. Upper block ending: First block ending = 0.
- 2. Number of bills in block: Count of bills in this reference block. (For bimonthly customers, count bill twice—determine block after dividing usage by 2.)
- 3. Number of bills accumulated: Accumulated sum of the bills in this and all previous blocks.
- 4. **Number of bills reverse accumulation:** Number of bills remaining above this reference block. This value is equal to the total number of bills (sum of column 2) minus the reference block's value in column 3.
- 5. Determinant in block: Sum of determinants in this reference block.
- 6. **Determinant accumulated:** Accumulated sum of all determinants less than this reference block's upper end. This value is equal to the reference block's value in column 5 plus the previous block's value in column 6.
- 7. **Determinant amounts from bills above block limit:** Accumulated sum of all determinants remaining above this block's upper end. This value is equal to the total of all determinants (sum of column 6) minus reference block's value in column 5.
- 8. **Determinant billed in block:** Sum of each determinant portion between the previous block's upper end and this reference block's upper end). This value is equal to the following formula:

(Upper block ending * Number of bills reverse accumulation) + Determinant in block - (Previous block's number of bills reverse accumulation * Previous block's upper end).

For example, if this formula were applied to the third block in the sample report at right:

 $(20,000 * 187) + 133,620 - (195 \times 10,000) = 1,923,620$

- 9. Accumulated price blocks for determinant: Amount of determinant in this and all previous blocks. This value is equal to the reference block's value in column 8 plus the previous block's value in column 9.
- 10. **Reverse accumulated price blocks for determinant:** Amount of determinant remaining above this reference block. This value is equal to the total of all determinant price blocks (sum of column 8) minus the reference block's value in column 9.

Creating a Bill Frequency Revenue Analysis

Bill Frequency Revenue Analysis lets you apply a selected rate schedule to the bill determinant data in a Bill Frequency Table over a user-specified number of bill months. This analysis is especially useful for computing revenues for very large customer populations when you do not have the time or computer resources to process individual bills multiple times.

When specifying the analysis rate schedule, you can choose from the current or historical versions.

Note: You cannot apply this analysis to rate schedules that have block expanders or hours use rate.

How to create a Bill Frequency Revenue Analysis:

1. At the Oracle Utilities Rate Management desktop, select **Analysis->Bill Frequency-**>**Revenue**.

The Compute Revenue for Bill Frequency Table dialog box appears.

- 2. In the **Bill Frequency Table** field, select the desired .bft file.
- Specify the Test Period by entering the start- and end-month using the MM/YYYY format. Oracle Utilities Rate Management automatically displays the dates of the selected Bill Frequency Table; accept the dates, or specify a shorter range within those dates.
- 4. Select the rate schedule that you wish to apply by clicking Select Schedule.

The Select Rate Schedule and Optional Rate Code dialog box appears.

- 5. Select an Operating Company, Jurisdiction, and Rate Schedule.
- Check one or more rate schedule types (Current/Historical or Trial). Your selections here determine which schedules are listed in the Type selection box (e.g., if you click just the Trial box, only those schedules stored as "Trial" are available for selection in the Type selection box).
- 7. Highlight one rate schedule in the Type Selection box.

To help you make your selection, Oracle Utilities Rate Management displays the first 50 lines of the selected rate schedule text in the lower window. If you wish to view the entire schedule (beyond 50 lines), click **Show All**. The text in this window is view-only—you cannot edit the schedule here.

If the selected rate schedule has clauses for customers on different rate codes and you did not specify rate code groups in the Bill Frequency Table, it is recommended that you explicitly specify one rate code that Oracle Utilities Rate Management will use for the entire population. To do so, select a rate code from the

From Rate Schedule Rate Code pull-down list. Alternatively, if the Bill Frequency Table has Rate Code Groups, you can select the blank from the same.

- 8. Click **OK** to return to the Compute Revenue for Bill Frequency Table.
- 9. Click **OK** to run the Revenue Report.

Chapter 3

Customer Revenue Analysis

This chapter explains how to compute trial revenue by applying a rate schedule to billing determinant data for one customer or a group of customers over a user-specified test period.

- Purpose of Customer Revenue Analysis
- Running a Customer Revenue Analysis

Purpose of Customer Revenue Analysis

Customer Revenue Analysis enables you to apply the formulas in a rate form to one or a group of user-selected customers over a test period (from one month to two years), and to report the resulting revenue. Depending upon how you structured the rate form, the report will show the revenue generated by each component of the rate formula and the number of billing units, as well as the total dollar amount. You can save and print the reports.

Customer Revenue can also be run in batch mode using a command line program. For more information, see **Customer Revenue** on page B-7 of **Appendix B**: **Setting Up Oracle Utilities Rate Management to run in Batch Mode**.

Required Inputs

Before you can perform a customer revenue analysis, you must have already created and saved the following inputs in the Oracle Utilities Data Repository using Data Manager:

- the rate form(s), including any riders,
- the list of customer or accounts you wish to analyze (if you want to work with just a single customer or account, the list is not necessary), and
- the customers' billing determinant data for the test period.

Please refer to the Data Manager User's Guide for instructions on creating these inputs.

Note: Oracle Utilities Rate Management lets you specify the desired rate form for the analysis. Or, you can let Oracle Utilities Rate Management use the current rate form version belonging to the first customer in the list.

Running a Customer Revenue Analysis

How to Run a Customer Revenue Analysis:

1. Select Analysis->Customer Revenue.

The Compute Revenue for Account(s) dialog box appears.

- 2. Under **Select By**, choose either **Account** or **Customer**. Then, **Select** the accounts or customers of interest using either of the following options:
 - **ID**: Type the ID of the account or customer.
 - List: Select the list that contains the IDs of the customers or accounts that you want to include in the analysis. If you believe that the contents of the list may have changed since the last time that the query associated with it was run, check the box for **Refresh list before using**. This option updates the list for this job and saves the new version of the list to the database, replacing the old version.
- 3. Specify the **Test Period From/To:** by entering the start- and end-month using the MM/ YYYY format. You can specify from one to 24 months.
- 4. Select a rate schedule using one of the following options:
 - Select Rate Schedule: Click this radio button, then the Select Schedule button if you want to select a rate schedule from the database. The Select Rate Schedule and Optional Rate Code dialog box appears. This box gives you access to all current, historical, and trial rate schedules stored in the Oracle Utilities Data Repository. Go to step 5.
 - From first Account in list: Click this radio button if you want Oracle Utilities Rate Management to use the current rate schedule version belonging to the first account in the list. Go to step 10.
- 5. In the Select Rate Schedule and Optional Rate Code dialog box, select an Operating Company, Jurisdiction, and Rate Schedule.
- 6. Check one or more rate schedule **types** (Current/Historical or Trial). Your selections here determine which schedules are listed in the Type selection box (e.g., if you click just the **Trial** box, only those schedules stored as "Trial" are available for selection in the **Type** selection box).
- 7. Highlight one rate schedule in the Type Selection box.

To help you make your selection, Oracle Utilities Rate Management displays the first 50 lines of the selected rate schedule text in the lower window. If you wish to view the entire schedule (beyond 50 lines), click **Show All**. The text in this window is view-only—you cannot edit the schedule here.

- 8. If the selected rate schedule has clauses for customers on different rate codes, you must specify one rate code that Oracle Utilities Rate Management will use for the entire list. There are three options:
 - Select a rate code from the From Rate Schedule Rate Code list, or
 - Check Inter-schedule mapping. In that case, Oracle Utilities Rate Management applies
 the rate code from the analysis rate schedule that most closely matches the customer's
 current rate code. (as defined in the Interschedule Mapping Table—see Appendix A
 Mapping Rate Codes Between Rate Schedules for instructions on setting up and
 maintaining this table).

Note: If you select Inter-schedule Mapping, the listbox above it must be left blank. If the box has a selection, simply click the small down arrow to the right of the list box and highlight the blank line in the list.

If you do not select a rate code using either of the two options just described, Oracle Utilities Rate Management will use the customer's current rate schedule/rate code if it is the same as the analysis rate schedule/rate code. Otherwise, any rate code-specific calculations are skipped.

9. Click **OK** when the **Select Rate Schedule and Optional Rate Code** dialog is completed.

The **Compute Revenue for Bill Frequency Table** dialog box reappears. The name of the selected rate schedule and (optional) rate code are displayed.

- 10. If you selected a current or historical rate schedule, you can also select the Use historical schedule version checkbox. This option uses the rate schedule version that was in effect for each revenue month. If you do not select this option, Oracle Utilities Rate Management applies just the version you specified in the Select Rate Schedule and Optional Rate Code dialog to the entire test period.
- 11. *Optional.* To include a Minimum Bill Report, check the **Append Minimum Bill Report** checkbox. See **Chapter 10: The Minimum Bill Report** for more information.

Note: In order to include the Minimum Bill Report, you must include the MINIMUM_BILL_REPORT=1 parameter in the LODESTAR.CFG file. See **Chapter 2**: **Configuration Files** in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information.

12. Optional. For additional analysis and reporting options, click Advanced.

The Advanced Compute Revenue for Customer(s) dialog box appears.

13. Complete the dialog box as follows:

Analysis Name: Optional. Type an analysis name to appear in the title bar of the report window.

Report Options: Click this button to define report options such as custom titles and whether or not to write the report to a file. See the on-line help for details.

Include:

- All Bill History Months: This is the default option—the analysis will use all billing history months with the date range unconditionally.
- Months with Same Schedule: Choose this option to limit the billing months that are reported and analyzed. This option will drop any billing months that have a different rate schedule code than the rate schedule selected.
- 14. Click OK to return to the Compute Revenue for Customer(s) dialog box.
- 15. Click **OK** to generate the report.
- To save the grand summary results for further analysis (such as Revenue Adequacy or Revenue Simulation), select **Revenue->Save**. (See later chapters for a description of these analyses.)

Sample Report

10/22/2002	Customer Re	venue Report Input	Page: 1
Computation Period	1: 05/1993 to 05/199	93	
Schedule 1		: GECO	, SF, 1-ML, V 3
ID or List Name Default Season Nai	ne	: RATE : Seas	XP_LIST_3b_CUST ON1
Interval Data Sou	rce (LODESTAR Enhand	ced Database): d:\p	owrline\user\NT152GLDB.BTE
Include		: All	Bill History Months
	Pag	<u>9</u>	
10/22/2002	Individual	Customer Revenue	Page: 2
Operating Company	: Generic Electric (Company Jurisdi	ction: SF
Computation Period	1: 05/1993 to 05/199	93	
Rate Schedule	: GECO, SF, 1-ML,	V 3	
Customer ID	:600002 Cust	omer Name:	Account ID: 600002
Bill Start Date	: 05/01/1993 00:0	0:00	
Bill End Date	: 05/31/1993 23:59	9:59	
Scheduled Read Dat	te: 05/28/1993 00:0	0:00	
Number of Days	: 31		
Bill Month	: 05/1993		
	Billing Units	Charge Rate	Revenue
KWH_CHARGE	318.0	0.100000	\$31.80
KW_CHARGE			\$126.00
EFFECTIVE REVENUE			\$157.80

Chapter 4

Single Step Analysis

This chapter explains how to compute revenue for one customer for one month using Single Step Analysis. This feature is especially useful for exploring the impact of various aspects of a rate form, since you control the pace and content of the calculations in "real time"—stepping through the rate form on-screen, one line at a time, modifying identifier values if desired.

- Purpose of Single Step Analysis
- Running a Single Step Analysis

Purpose of Single Step Analysis

Single Step Analysis computes the revenue amount for one customer for one month. You view and control the computations on-screen, executing one rate schedule statement at a time. You can modify identifier values and see the impact immediately.

Required Inputs

Before you can perform a single step analysis, you must have already created and saved the following inputs in the Oracle Utilities Data Repository using Data Manager:

- the rate form
- the customers' billing determinant data for the bill month.

Please refer to the Data Manager User's Guide for instructions on creating these inputs.

Running a Single Step Analysis

How to Run a Single Step Analysis:

1. At the Oracle Utilities Rate Management desktop, select Analysis->Single Step.

The Single Step Customer Revenue dialog box appears.

- 2. In the ID field, type the ID of the account whose bill determinant data you want to analyze.
- 3. Specify the **Bill Month** using the MM/YYYY format.
- 4. Select a rate form for the analysis using one of the following options:
 - Select Rate Form: Click this radio button, then the Select Rate Form button if you want to select a specific rate schedule from the database. The Select Rate Schedule and Optional Rate Code dialog box appears. This box gives you access to all current, historical, and trial rate schedules stored in the Oracle Utilities Data Repository. Go to step 5.
 - **Customer's Billing Rate Form:** Click this radio button if you want Oracle Utilities Rate Management to use the current rate schedule version belonging to the account. Go to step 10.
- 5. In the Select Rate Schedule and Optional Rate Code dialog box, select an Operating Company, Jurisdiction, and Rate Schedule.
- 6. Check one or more rate schedule **Types** (Current/Historical or Trial). Your selections here determine which schedules are listed in the Type selection box (e.g., if you click just the **Trial** box, only those schedules stored as "Trial" are available for selection in the selection box).
- 7. Highlight one rate schedule in the selection box.

To help you make your selection, Oracle Utilities Rate Management displays the first 50 lines of the selected rate schedule text in the lower window. If you wish to view the entire schedule (beyond 50 lines), click **Show All**. The text in this window is view-only—you cannot edit the schedule here.

- 8. If the selected rate schedule has clauses for customers on different rate codes, you must specify the rate code that Oracle Utilities Rate Management will apply for the analysis. There are two options:
 - Select a rate code from the From Rate Schedule Rate Code list, or
 - Leave the rate code blank, in which case Oracle Utilities Rate Management will use the rate code associated with the account. If there is no rate code associated with the account, Oracle Utilities Rate Management will skip the rate code-specific calculations.
- 9. Click **OK** when the Select Rate Schedule and Optional Rate Code dialog is completed to be returned to the Single Step Customer Revenue dialog box.

Note: The name of the selected rate schedule and (optionally) rate code are displayed.

- 10. *Optional.* To apply additional report features, such as custom titles and whether or not to write the report to a file, click the **Report Options** button. See the on-line help for details.
- 11. In the **Single Step Customer Revenue** dialog box, click **OK** to begin the single step analysis.

The windows for the Single Step module appear.

The module consists of two to three windows (depending upon whether or not the rate schedule incorporates interval data). The top left window displays the statements that make up the rate form. The next statement to be executed is highlighted there (comments are skipped). The top right window displays the identifiers in the rate form and their values. The lower window is a graphical display of the interval data (displays only when an interval data identifier is highlighted in the top right window).

When the rate form is first displayed, the first executable statement is highlighted. To execute the statement, select **Single-Step->Step** from the menu bar, or press F8. You can execute each statement this way. If you want the program to step through the schedule automatically, much like a slide show, select **Single-Step->Jog**.

To execute the rate form *only up to a particular statement*, highlight the statement in the upper left window and select **Single-Step->Run to Selection** from the menu bar, or press F4 (that way, you avoid having to single-step through every statement prior to the one of interest).

To run all statements to completion, select **Single-Step->Run** or press F5. To return to the first statement, select **Single-Step->ReStart** or press F10. If you want to view all identifiers in the rate schedule at once—including temporary identifiers that are otherwise displayed only when the particular statement executes—select **Show all identifiers**.

The upper right window displays the identifiers in the rate form. The first word in each line tells you the type of identifier. Next on the line is the identifier name. If the identifier has a value, computed or not, the value is also displayed, along with its type.

12. If desired, you can double-click on an identifier to modify it. A dialog box appears with the value in an edit box. You can change the value, and click **OK** to save the value in the executing rate schedule. *If the identifier is an interval data handle, the value displayed contains its total, maximum, pulse multiplier, and pulse offset. This value is not modifiable.*

Note: You must enter the same value type-Integer, Float, etc.-as the current value.

13. After you have run the statements, you can view the resulting report by selecting **Single-Step->Display Report** from the menu bar, or press F6.

You can export or print the report using options from the File menu. You can also search for selected text or copy all or a selected portion to the clipboard using options from the Edit menu.

14. To close the report, select **File->Close**.

Chapter 5

Adjusting Revenue and Price Using Revenue Simulation

This chapter explains how to use the Revenue Simulation feature of Oracle Utilities Rate Management. The purpose of Revenue Simulation is to take the results of a revenue analysis and manipulate various components to achieve a desired revenue or to determine an optimum price.

- Purpose of Revenue Simulation
- Running a Revenue Simulation

Purpose of Revenue Simulation

A summary of bills is created when a customer or bill frequency revenue calculation is performed and the results are saved to the database. Normally, the customer list used for such calculations consists of all customers on a particular rate schedule and possibly a particular rate code. The information saved to the database coincides with the grand total page in the report produced by the revenue analysis.

Revenue Simulation allows you to adjust the grand summary results of a revenue analysis. Initially, Oracle Utilities Rate Management displays the analysis results in a table format, with two identical sets of data shown side-by-side. The left side contains the original values; the right side, the "adjusted" values. The adjusted columns are there for you to modify as desired. Typically, you first adjust the determinant units to fit a predicted usage, and then adjust the prices to generate the required revenue. Once the best prices have been determined, you can update the prices in the original rate schedule to create a new rate schedule for the next year.

Required Inputs

Before you can perform revenue simulation, you must have already created and saved the grand summary results of the revenue analysis with which you wish to work. Perform either a Customer or Bill Frequency Revenue Analysis and save the results to the database. This is accomplished by selecting **Revenue->Save** while the Revenue Analysis Report window is active. You may be prompted for a name and optional comment.

Running a Revenue Simulation

How to Open a Revenue Analysis File:

You can open the results of either a Bill Frequency or Customer Revenue Analysis.

1. Select Analysis->Revenue Simulation.

The Revenue Simulation dialog box appears.

- 2. Complete the dialog:
 - Name: Select the revenue analysis results that you would like to manipulate.
 - **Comment:** Optional note.
 - Click Open.

Note: Alternately, you can import a Revenue Simulation File (extension .REV) from a diskette or another area of your network by selecting **Import**.

How to adjust the amounts:

You can modify the figures in the adjusted columns and immediately see the impact. (See the table below for detailed information about the columns you can edit. See also the illustration at right.)

- 1. Click the mouse pointer in a cell whose value you want to change.
- 2. Type the new figure as desired, and press ENTER.

Oracle Utilities Rate Management performs the calculations and updates the figures.

Column	Description					
Target Revenue	The Target Revenue value may be changed to represent the amount of revenue required for the next billing period. Changing this value has no effect on the other adjusted values, it is simply a place holder.					
	Changing the Target Revenue will also alter the Revenue Difference (Rev Diff).					
Adjusted Units	The Adjusted Units value may be altered to compute a new Adjusted Revenue value. Adjusted Units are multiplied by the Adjusted Rate to determine the Adjusted Revenue. If there is an Adjusted Distribution associated with the Adjusted Units, then it is also adjusted.					
Adjusted Rate	The Adjusted Rate may be changed to modify the Adjusted Revenue. The Adjusted Rate is multiplied by the Adjusted Units to calculate the new Adjusted Revenue.					
Adjusted Revenue	Changing the Adjusted Revenue will alter the Adjusted Rate. The new Adjusted Rate is calculated by dividing the Adjusted Revenue by the Adjusted Units.					
	Changing the Adjusted Revenue will also alter the Revenue Difference (Rev Diff).					

The Revenue Simulation Window

The following window shows unadjusted amounts in a Revenue File that Oracle Utilities Rate Management displays in the Revenue Simulation window. Depending on how you define a rate schedule, a Revenue File will have a varying amount of detail.

Bevenue Simulation (off)										_ 7 X
	No. Dills	Dilling Units	Distribution	Charge Rate	Revenue	Adj Units	Adj Dist	Adj Rate	Adj Revenue	Target Rev
EWH			2000 Contract 120 Contract							
ULOCK1	5	1.000.0	35.67%	0.015531	\$15.53	1.000.0	35.67%	0.015531	\$15.53	
BLOCKHICH	5	1,000.4	64.00%	0.099410	\$179.20	1,000.4	64.0026	0.03940.0	\$179.20	
I NI RGY_CLARG	5	2.803.4	100.00%		\$194.81	2.8D3.4	100.00%		\$194.81	
TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	5				\$185.07				\$185.07	\$ 185.07
KWH	5	2.000.4								

The following window shows adjusted amounts in the same Revenue File. You can adjust different amounts and see the effect on related column amounts.

Beverne Similation (n81)										_ 7 x
	Na. Oilla	Dilling Units	Distribution	Charge Rate	Revenue	Adj Units	Adj Dist	Adj Rate	Adj Revenue	Target Rev
production KWH production										
ELUCKI SECON	5	1.0 DQ. D	35.67%	0.015531	G 15.53	1.208.0	42.81%	0.015531	\$18.54	
BLOCKHIGH STOCK	5	1,010.4	64.0086	11.099410	\$179.20	1,600.4	57.19%	0.03700.0	\$155.501	
INT RGY_CHARGE	5	2.803.4	100.00%		S194.81	2.803.4	100.00%		\$174.17	
STEELCHVE_HENDROLS	5				\$185.07				\$164.43	\$150.00
personal KWH personal	5	2.001.4								

How to save your changes:

To save the revenue simulation results with the same name as the version you originally opened, select **File->Save**. To save the file with a new name, select **File->Save As**.

How to export the file:

You can also export the revenue analysis in either of two ASCII formats. The first is a ".CSV" or "comma separated values" format, which is compatible with most spreadsheet programs. The second format is a ".REV" format, which is designed to enable you to share the file with other Oracle Utilities Rate Management users and workstations.

- 1. Select File->Export.
- 2. Select the file type, either .CSV or .REV.
- 3. Save the report in whatever directory you like.

Chapter 6

Customer Impact Analysis (Rate Comparisons)

This chapter explains how to use Oracle Utilities Rate Management to compare the effect of different rate schedules on one or a group of customers and to identify migrating customers.

- The Purpose of Customer Impact Analysis
- Running a Customer Impact Analysis

The Purpose of Customer Impact Analysis

Oracle Utilities Rate Management Customer Impact lets you analyze the effect of a change in a rate schedule on a group of customers. The report shows the bill determinant values for each month and in total. Depending on how you structure the rate schedule, the report also shows billing determinant values computed using formulas specified in the rate schedule.

You can compare any number of rate schedules at one time. The report shows the revenue for each month, the difference between the first (base) schedule and the other schedules, and whether or not a customer is likely to switch to a new rate.

Customers that would be better off on another rate schedule can be flagged and put into a list for further analysis. This helps you identify customers migrating from one rate to another.

Customer Impact produces Individual and Summary reports, which you can save and print.

Any information on the report can be graphed and analyzed further. You can save and print graphs.

Customer Impact can also be run in batch mode using a command line program. For more information, see **Customer Impact** on page B-2 of **Appendix B**: **Setting Up Oracle Utilities Rate Management to run in Batch Mode**.

Required Inputs

Before you can perform a customer impact analysis, you must have already created and saved the following inputs in the Oracle Utilities Data Repository using Data Manager:

- · rate schedules, rate codes, and (optionally) inter-schedule mappings
- the list of customers or accounts you wish to analyze (if you want to work with just a single customer or account, the list is not necessary)
- the customers' billing determinant data for the test period.

Refer to the *Data Manager User's Guide* and the *Rules Language User's Guide* for instructions on creating these inputs.

Running a Customer Impact Analysis

How to Run a Customer Impact Analysis:

1. Select Analysis->Customer Impact.

The **Customer Impact** dialog box appears.

- 2. Select either Account or Customer in the Select By box.
- 3. Select the accounts or customers of interest using one of the following options:
 - All: Select this option if you want to apply the analysis to all accounts or customers in the database.
 - **ID:** Type the ID of one account or customer.
 - List: Select the list that contains the IDs of the customers or accounts that you want to include in the analysis. If you believe that the contents of the list may have changed since the last time that the query associated with it was run, check the box for **Refresh list before using**. This option updates the list for this job and saves the new version of the list to the database, replacing the old version.
- Specify the Test Period From/To: by entering the start- and end-month using the MM/ YYYY format.
- 5. To select a rate schedule as the basis of comparison, click the Add button.

The **Select Rate Schedule and Optional Rate Code** dialog box appears. This dialog gives you access to all rate schedules and rate codes currently stored in the Oracle Utilities Data Repository.

- 6. Select an Operating Company, Jurisdiction, and Rate Schedule.
- 7. Check one or more rate schedule **Types** (Current/Historical or Trial). Your selections here determine which schedules are listed in the **Type** selection box (e.g., if you click just the **Trial** box, only those schedules stored as "Trial" are available for selection in the selection box).
- 8. Highlight one rate schedule in the selection box.

To help you make your selection, Oracle Utilities Rate Management displays the first 50 lines of the selected rate schedule text in the lower window. If you wish to view the entire schedule (beyond 50 lines), click **Show All**. The text in this window is view-only—you cannot edit the schedule here.

9. If the base rate schedule includes SELECT RATE CODE statements that apply different calculations to customers on different rate codes, and the customers in the analysis have rate codes other than those in this base rate schedule, you must select a single rate code to be used as the base rate code. To do so, select the rate code from the From Rate Schedule Rate Code drop-down list. If you leave this selection blank, Customer Impact checks the Account Rate Code History Table for the rate schedule/rate code of the account. If it matches the analysis rate schedule/rate code, Customer Impact applies it. Otherwise, Customer Impact skips the rate code-specific statements.

Note: Inter-schedule mapping is disabled for the base rate schedule, since you are specifying the rate code *to be mapped to*.

- 10. Click **OK** to be returned the **Customer Impact** dialog box.
- 11. Specify as many comparison rate schedules as you'd like, by repeating steps 4 through 9, keeping in mind one important difference in step 8 (when you specify the rate code). If the comparison rate schedule includes SELECT RATE CODE statements that apply different calculations to customers on different rate codes, and the customers in the analysis have rate codes other than those in this comparison rate schedule, you must specify which rate code Customer Impact applies. There are three possible scenarios:

- You can explicitly select a rate code from comparison rate schedule using the **From Rate Schedule Rate Code** drop-down list, or
- Available only if you are applying the comparison to a list of customers or accounts. You can check the
 Inter-schedule Mapping option. In that case, Oracle Utilities Rate Management
 applies the rate code from the comparison rate schedule that most closely matches the
 customer's current rate code (as defined in the Inter-Schedule Mapping Table—see
 Appendix A: Mapping Rate Codes Between Rate Schedules for instructions on
 setting up and maintaining this table).

Note: If you check the Inter-schedule Mapping option, the listbox above it must be blank. If the box has a selection, simply click the small down arrow to the right of the list box and highlight the blank line in the list. If you do select Inter-schedule Mapping, the analysis will be slower.

If you do not select a rate code using either of the two options just described, Customer Impact uses the rate code from step 8 above, if the base and comparison rate schedules are the same.

If if the schedules are *not* the same, Customer Impact checks the Inter-Schedule Mapping Table for applicable mappings. If none have been defined, Oracle Utilities Rate Management considers the rate code empty and skips over the rate code-specific statements.

12. *Optional.* To include a Minimum Bill Report, check the **Append Minimum Bill Report** checkbox. See **Chapter 10: The Minimum Bill Report** for more information.

Note: In order to include the Minimum Bill Report, you must include the MINIMUM_BILL_REPORT=1 parameter in the LODESTAR.CFG file. See **Chapter 2**: **Configuration Files** in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information.

- 13. Select the number of decimal places to display for Bill Determinants from the Bill Determinants Displayed to n Decimal Places drop-down list. If the number in the database has more decimal places than the number selected, the number displayed on the report is rounded off the number of decimals selected. If the number in the database has less decimal places than the number selected, the number displayed on the report will have zeros appended to the end to display the number of decimals selected. The default setting is 1.
- 14. If you want to flag customers that would be better off on another rate schedule, click the **Advanced** button.

The Advanced Customer Impact Inputs dialog box appears.

15. Complete this dialog as follows:

Analysis Name: Optional. Type a name to appear in the report window's title bar.

\$ Difference: Click the check box and supply a dollar value. If you use this option, the program will flag customers with a dollar difference between revenue from the base rate schedule and revenue from any of the other rate schedules greater than the amount you supplied (for the entire test period). This value is divided by the number of months in the test period and the result is used as the absolute comparison value for each month; the input value is used as the comparison value for the total of all months.

% Difference: Click the checkbox and supply a percent value. If you use this option, Customer Impact flags customers with a percent difference between revenue from the base rate schedule and revenue from any of the other rate schedules greater than the amount you supplied (total difference is compared, not monthly difference).

Report: If you selected any switch threshold options, you can choose either **All Customers** if you don't want to limit the output, or **All Over Threshold** if you want to report just those customers that may switch to another rate schedule.

Enter Name for List of Customers: If you want the program to create a list of the customers who may switch to another rate schedule, enter a name for the list here.

Assign each customer to its best rate's list: Check here if you want the program to create a list for each rate (the list name is the supplied list prefix appended with the rate schedule name). A customer will be added to a rate list if the customer's bill is the minimum on that rate (ties go to the first rate with the minimum).

Append Billing Impact Frequency Report based on blocking: If you check this option, a Billing Impact Frequency Report page will be appended to the Customer Impact Report. You must select a blocking to use in creating this report. The blocking can contain at most 201 steps (-100 to 100 by 1, -500 to 500 by 5, etc.).

Report Options: Click this button to define report options such as adding report titles and saving the results to a file. **Note:** If you want to graph the results or save the report to a CSV file, check the **Keep Data** option on the **General Options** tab of the **Report Options** dialog.

- 16. Click **OK** to return to the **Customer Impact** dialog box.
- 17. You have two options for outputting the results of the analysis:

Graph: Creates a graph and report of the results.

Report: Creates a tabular report.

18. Once you have created the report, you can export or print it through the File menu.

Sample Report

10/22/2002	Customer Impa	act Report Input	Page: 1
Computation Period: 0	5/1993 to 05/1993	3	
Schedule 1: GECO, SF,			
Schedule 2: GECO, SF,			
Account ID: 600002	Default Seaso	n Name: SEASON1	
	Page		
10/22/2002	Individual (Customer Impact	Page: 2
Operating Company: Ge	neric Electric Co	ompany Jurisdiction: S	F
Computation Period: 0	5/1993 to 05/1993	3	
Schedule 1 : GECO, SF Schedule 2 : GECO, SF			
Customer ID: 600002 Account ID : 600002	Customer Name	:	
	Billing Po	eriod History	
	05/1993		
Bill Month	05/1993		
Bill Start Date	05/01/1993		
Bill End Date	05/31/1993		
Scheduled Read Date			
Number of Days	31		
KWH	318.0		
KW	36.0		
	Billing Per	riod Comparison	
	05/1993	Total	
Schedule 1			
Revenue	\$26.99	\$26.99	
Schedule 2			
Revenue	\$238.88	\$238.88	
Revenue Diff	\$211.89	\$211.89	
% Diff	785.11%	785.11%	

Chapter 7

Generating Typical Bill Scenarios

This chapter explains how to use Typical Bill analysis. Typical Bill lets you simulate billing determinants and compute revenue from a rate schedule, and compare the difference in revenue between two rate schedules.

- The Purpose of Typical Bill Analysis
- Running a Typical Bill Analysis

The Purpose of Typical Bill Analysis

Oracle Utilities Rate Management Typical Bill Analysis lets you analyze the effect of a change in a rate schedule by simulating values for billing determinants. The report shows the revenue from different values of a combination of billing determinants. You can analyze one rate or compare the difference between two rates.

The report shows the revenue for each scenario, the difference between two rate schedules, and cents per a user-defined determinant. Different revenue months in a year can be analyzed if seasonality differences exist in a rate schedule.

Typical Bill produces one report, which you can save and print.

Any information on the report can be graphed and analyzed further. You can save and print graphs.

Typical Bill can also be run in batch mode using a command line program. For more information, see **Typical Bill** on page B-13 of **Appendix B**: **Setting Up Oracle Utilities Rate Management to run in Batch Mode**.

Required Inputs

Before you can perform a typical bill analysis, you must have already created and saved the rate schedule or schedules you wish to analyze.

Running a Typical Bill Analysis

How to Run a Typical Bill Analysis:

1. Select Analysis->Typical Bill.

The Typical Bill Analysis dialog box appears.

2. Select the first rate schedule by first clicking **Select Schedule 1**.

The Select Rate Schedule and Optional Rate Code dialog box appears.

- 3. Select an **Operating Company**, **Jurisdiction**, and **Rate Schedule**.
- 4. Check one or more rate schedule **Types** (Current/Historical or Trial). Your selections here will determine which schedule types are displayed in the **Type** selection box (e.g., if you click just the "Trial" box, only those schedules stored as "Trial" will be available for selection in the selection box.
- 5. Highlight one rate schedule in the selection box.
- 6. The program requires a rate code to determine how to price out the billing determinants. There are three options:
 - Select a rate code from the From Rate Schedule Rate Code list. If you do not select a
 rate code, the program will use the customer's current rate code to determine the correct
 pricing.
 - Check **Inter-schedule Mapping**. Oracle Utilities Rate Management will check the Inter-Schedule Mapping Table to determine how to map the rate code.
- 7. Click **OK** to return to the **Typical Bill Analysis** dialog box.
- 8. *Optional.* Select a second rate schedule to compare with the first by clicking **Select Schedule 2** and repeating steps 3 through 7.
- 9. In the **Typical Bill Analysis** dialog box, specify the **Bill Month** using the MM/YYYY format.
- 10. Specify the first determinant and value for simulation:
 - In the **Determinant** field, select one determinant from the drop-down list (this list box contains all determinants in the rate schedule(s)).
 - Under Values, provide one value or a range of values for the determinant selected.
- 11. Click the **Add/Update** button to add the determinant to the list of determinants and values that are being simulated for the analysis.
- 12. Repeat steps 10 and 11 as many times as there are determinants in the list box. At least one determinant must have a range of values specified. If you do not provide a value, it defaults to zero. You can select up to a maximum of 12 determinants for the analysis.
- 13. If you want to include cents per determinant in your report, click **Advanced**. Otherwise, go to step 15.

The Advanced Typical Bill dialog box appears.

- 14. Check the Compute Cents per Determinant option to get an additional column on the Typical Report with the cents per determinant for each rate schedule you selected. Then, choose the determinant you wish to report.
- 15. If you want to define additional report options, such as adding report titles and saving the results to a file, click **Report Options** (see the on-line help for details). **Note:** If you want to graph the results, be sure that the **Keep Data** option under Report Options is checked.
- 16. Click **OK** to return to the Typical Bill dialog box.
- 17. You have two options for outputting the results of the analysis:

Graph: Creates a graph and report of the results.

Report: Creates a tabular report.

18. Once you have created the report, you can export or print it through the File menu.

Sample Report

10/22/2002		Typical Bill Re	port	Page:
Computation	Period: 01/2000	to 01/2000		
Schedule 1 Schedule 2		1-ML, 05/06/1993 1-TR, V 6, 1TSLM		
)eterminant Constant Va	:KWH from Ø lues: PK_	to 100 by 20 KW = 20		
KWH	\$ per Bill RS 1	\$ per Bill RS 2	% difference	\$ difference
0	\$0.00	\$12.70		\$12.70
20	\$24.00	\$13.26	-44.75%	(\$10.74)
40	\$48.00	\$13.82	-71.21%	(\$34.18)
60	\$72.00	\$14.38	-80.03%	(\$57.62)
	in. an	ė46 06	-84.44%	(\$81.06)
80	\$96.00	\$14.94	-04.44%	(381.00)

Chapter 8

Finding Crossing Points Between Rate Schedules

This chapter explains how to use Crossing Point analysis. Crossing Point compares the revenue differences between two different rate schedules as determinant values vary.

- The Purpose of Crossing Point Analysis
- Analyzing Crossing Points

The Purpose of Crossing Point Analysis

Crossing Point Analysis lets you compare the revenue differences between two different rate schedules as determinant values vary. You can specify what determinants will be used, which will be held constant, and which will vary during the crossing point calculation. The maximum number of variable determinants is six.

In general, the crossing point computation consists of a series of nested loops. Each loop represents one variable determinant that changes value each time the loop is iterated. The threshold minimum value computation involves finding the minimum revenue difference between rate schedules that fall within the +/- difference provided by the user. Only minimum values that exclusively fall within the supplied threshold are reported. Minimum values that fall outside of the threshold or equal to the threshold are ignored.

Crossing Point produces one type of report, which you can save and print.

Any information on the report can be graphed and analyzed further. You can save and print graphs.

Crossing Point can also be run in batch mode using a command line program. For more information, see **Crossing Point** on page B-16 of **Appendix B**: **Setting Up Oracle Utilities Rate Management to run in Batch Mode**.

Required Inputs

Before you can perform crossing point analysis, you must have already created and saved the rate schedules you wish to analyze.

Analyzing Crossing Points

How to Run a Crossing Point Analysis:

1. Select Analysis->Crossing Point.

The Crossing Point Analysis dialog box appears.

2. Select the first rate schedule by first clicking the **Select Schedule 1** button.

The Select Rate Schedule and Optional Rate Code dialog box appears.

- 3. Select an **Operating Company**, **Jurisdiction**, and **Rate Schedule**.
- 4. Check one or more rate schedule **Types** (Current/Historical or Trial). Your selections here will determine which schedule types are displayed in the **Type** selection box (e.g., if you click just the **Trial** box, only those schedules stored as "Trial" will be available for selection in the selection box).
- 5. Highlight one rate schedule in the selection box.

To help you make your selection, Oracle Utilities Rate Management displays the first 50 lines of the selected rate schedule text in the lower window. If you wish to view the entire schedule (beyond 50 lines), click **Show All**. The text in this window is view-only—you cannot edit the schedule here.

- 6. If the rate schedule includes SELECT RATE CODE statements that apply different calculations for different rate codes, you must select one of the rate codes to be used in the analysis run. There are two options:
 - Select a rate code using the From Rate Schedule Rate Code drop-down list, or
 - Leave the **From Rate Schedule Rate Code** field empty. In that case, Crossing Point applies the first rate code in the schedule.
- 7. Click OK to return to the Crossing Point Analysis dialog box.
- 8. Select a second rate schedule by clicking Select Schedule 2 and repeating steps 3 through 7.
- 9. Select one bill determinant from the **Determinant** drop-down list.
- Under Values, provide one value or a range of values for the determinant selected. If you
 include one or two determinants, you must include all three values (Low/Constant, High, and
 Step) for each. For the third and subsequent determinants, you can only supply the Low/
 Constant value.
- 11. Click **Add** to add the determinant to the list of determinants and values that are being simulated for the analysis.
- 12. Repeat steps 9 through 11 as many times as you like, up to a maximum of six. *At least one determinant must have a range of values specified.* If you do not provide a value, it defaults to zero.
- 13. Under **Min Diff**, supply a minimum difference amount if you want to limit the report output to the combinations of billing determinants that fall within a certain range of differences between rate schedules.
- 14. Under **Date**, enter a date (MM/YYYY) for Crossing Point to use when it comes across rate schedule computations that involve seasons.
- 15. Under Generated Determinant, click Compute and either kW, kWh, or Load Factor if you want to compute one of those determinants from your simulated billing determinant values.
- 16. Click **Set Code**, if you want to match the billing determinant code to the generated determinant. The **Set Determinant Code** dialog box appears.
- 17. Complete the dialog as follows:

- For **kWh**, select the determinant code that you use to represent kWh if you are computing kW or Load Factor.
- For **kW**, select the determinant code that you use to represent kW if you are computing kWh or Load Factor.
- For **Load Factor**, select the determinant code that you use to represent Load Factor if you are computing kW or kWh.
- 18. Click **OK** to return to the Crossing Point dialog.
- 19. Graph or report the results by clicking Graph or Report.

Note: If you want to graph the results, be sure that the **Keep Data** option in the **Report Options** dialog box is checked.

Sample Report

10/22/2002		Cro	ssing Point Report		Page: 1
Computation Pe	riod: 01/20	00 to 01/2000			
Schedule 1	: GECO, SF	, 1-ML, V 9			
Schedule 2	: GECO, SF	, 1-ML, V 6			
dinimum Value					
Determinant		0.000 to 100.0 0.000 to 100.			
constant Value	5:				
	КW	KWH	Revenue RS 1	Revenue RS 2	\$ Difference
0.0	30	0.000	\$0.00	\$47.00	\$47.00
20.0	30	0.000	\$0.00	\$47.00	\$47.00
40.0	30	100.000	\$121.00	\$97.00	(\$24.00)
60.0	30	100.000	\$191.00	\$97.00	(\$94.00)
	30	100.000	\$281.00	\$97.00	(\$184.00)
80.0			\$381.00	\$97.00	(\$284.00)

Chapter 9

Managing your Portfolio of Rate Schedules with Revenue Adequacy

This chapter explains how to use Revenue Adequacy analysis. The purpose of Revenue Adequacy is to sum the revenue for several rate classes and determine the difference between this sum and a required total target revenue. Revenue Adequacy can be used to sum both computed (actual) and predicted (adjusted or simulated) revenues so that "what-if" scenarios can be tested.

- Purpose of Revenue Adequacy
- Running a Revenue Adequacy Analysis
- Deleting a Revenue Adequacy Analysis

Purpose of Revenue Adequacy

A Revenue Adequacy is created from the results of many Revenue Analyses spanning a number of rate classes. The revenue values, both computed and predicted via Revenue Simulation, are displayed in a table format along with the target revenues. A total line is computed by summing the values from all of the revenues selected. The effective (computed actual), adjusted, and target revenue values, along with the actual and percent difference between the adjusted and target values, are displayed for each revenue and also the total.

There is also additional information displayed for each revenue in the table, including the rate schedule used to produce the revenue and whether the revenue was produced from a customer list or a Bill Frequency Table.

No fields in the Revenue Adequacy Table are directly editable. You can change the values for an individual revenue by selecting the revenue and then opening a Revenue Simulation Window for it. After saving any changes in the Revenue Simulation Window and closing it, the total line in the Revenue Adequacy Table will be recalculated.

You may also enter values for the rate base and cost to serve into a separate dialog and Oracle Utilities Rate Management will calculate the return on equity. Revenue Adequacy tables may be saved to the database.

Required Inputs

Before you can analyze your revenue through Revenue Adequacy, you must have performed either a Customer or Bill Frequency Revenue Analysis for each rate class of interest and have saved the results to the database. This is accomplished by selecting **Revenue->Save** from the menu bar while the Revenue Analysis Report Window is active. You may be prompted for a name and optional comment.

Running a Revenue Adequacy Analysis

How to Create a New Analysis:

1. Select Analysis->Revenue Adequacy->Create.

The New Revenue Adequacy dialog box appears.

2. Complete the dialog:

Name: Enter a name to identify the analysis.

Revenues: Highlight each one of the previous revenue analyses that you want to include in this revenue adequacy analysis. To highlight more than one, hold down the Shift or Option key, or drag the mouse pointer across the names.

3. Click OK.

A Revenue Adequacy Window appears displaying all the revenues selected.

How to open an existing analysis:

1. Select Analysis->Revenue Adequacy->Open.

The Revenue Adequacy dialog box appears.

2. Complete the dialog:

Name: Select the name of an existing Revenue Adequacy analysis from the drop-down list.

Comment: Optional. Enter or edit text to describe the analysis.

3. Click Open.

The Revenue Adequacy Window opens.

How to use the Revenue Adequacy Window:

Once a Revenue Adequacy Window is open, you have several options:

- Open a Revenue Simulation window for an individual revenue: Highlight the revenue by clicking on its row label on the left side of the table, then select **Revenue->Open Revenue**. The results of any changes made in this window will only be reflected in the Revenue Adequacy Window after the changes are saved and the window is closed.
- Add a revenue to the Revenue Adequacy table: Select any revenue in the Revenue
 Adequacy Table by clicking on its row label on the left side of the table, and then select
 Revenue->Insert Revenue. The Revenue Simulation dialog opens. Select the name of the
 revenue that you wish to add from the Name drop-down list and click Select. The revenue
 will be inserted after the selected revenue in the Revenue Adequacy Table.
- Delete a revenue from the Revenue Adequacy table: Select the revenue in the table by clicking on its row label on the left side of the table, and then select Revenue->Remove Revenue.
- Calculate the return on equity: Select Revenue->Info. The Revenue Adequacy Information dialog box opens. Enter a value in both the **Rate Base** and **Cost to Serve** edit fields. The Return on Equity value will automatically be recalculated each time the Rate Base or Cost to Serve is changed. Select **OK** to accept the entries and return to the table. The formula for Return on Equity is:

ROE = ((Total Revenue - Cost to Serve) / Rate Base) * 100%.

- Refresh the Revenue Adequacy table: Select Revenue->Refresh.
- Save the Revenue Adequacy analysis: You can save the contents of the table by selecting File->Save or Save as.
- Export the Revenue Adequacy analysis: You can export the contents of the table to a neutral format that is compatible with most spreadsheet programs (.csv or comma-separated values).

To do so, select File->Export.

The following is an example of a Revenue Adequacy Window:

	Effective 9	Adjusted 9	Target 9	9 Delta	% Delta	Rate Schedule	Data Type	Data Name
N2	\$100.70	\$100.04	\$128.08	\$10.04	0.62%	1-ML	Cust List	
AD CA	\$102.23	0102.23	0102.23	CB.OD	0.00%	I TR	Bill Frog	n5.BFT
V2	\$442.00	\$442.00	\$442.00	\$11.111	0.0076	1-AA	Custilist	
mll	\$185.07	9185.07	0185.07	S8.00	0.00%	I ML	Cust List	
m80	\$115.17	\$164.40	\$160.00	\$4.43	2.026	1-MI	Cast List	
Tutal	\$1,143.10	\$1,114.07	\$1,099.30	\$14.77	1.3/64			

Deleting a Revenue Adequacy Analysis

How to delete an existing analysis:

1. Select Analysis->Revenue Adequacy->Open.

The Revenue Adequacy dialog box appears.

2. Complete the dialog:

Name: In the **Name** drop-down list, select the name of the existing Revenue Adequacy analysis that you want to delete.

3. Click **Delete**.

Chapter 10

The Minimum Bill Report

This chapter explains how to run the Minimum Bill Report, including:

- Purpose of the Minimum Bill Report
- Minimum Bill Report Calculations
- Running a Minimum Bill Report

Purpose of the Minimum Bill Report

The Minimum Bill Report is a monthly summary report for all customers receiving a minimum bill. The report is appended to Customer Revenue Analysis (see **Chapter 3**: **Customer Revenue Analysis**) and Customer Impact Analysis (see **Chapter 6**: **Customer Impact Analysis (Rate Comparisons)**) reports.

The report is grouped by rate schedule, and shows totals for client specified billing determinant values and revenue calculations. A separate page of the report is created for the base rate and each proposed rate used in the calculation.

Required Inputs

In addition to the inputs required by the Customer Revenue Analysis and Customer Impact Analysis reports, the Minimum Bill report also requires that the specific billing determinants and revenue values be properly identified in the rate schedule. See **Running a Minimum Bill Report** on page 10-4 for more information.

Minimum Bill Report Calculations

Billing Determinant Values

For each rate, billing determinant values represent the total amount for each billing determinant that was used to calculate revenues. For example, the client could input KWH as one of the nine billing determinants to report. The Minimum Bill Report would include the total KWH that was used to calculate revenues for each rate for all customers.

Calculated Revenue Values

For each rate, revenue values represent the total amount for each revenue variable that was used to calculate revenues. For example, the client could input FUEL_REVENUE as one of the nine revenue variables to report. The Minimum Bill Report would include the total FUEL_REVENUE that was used to calculate revenues for each rate for all customers. The clients will always need the revenue values reported for \$BASE_REVENUE and \$EFFECTIVE_REVENUE.

Number of Accounts Receiving a Minimum Bill

For each rate, the number of accounts represents the cumulative number of accounts that received a minimum bill. This is not the number of individual bills or months of minimum bills. Each account is only counted once.

Running a Minimum Bill Report

The Minimum Bill Report is run as part of either a Customer Revenue Analysis or a Customer Impact Analysis report. **Chapter 3** and **Chapter 6** (respectively) describe these reports and how to run them.

Turning On the Minimum Bill Report

To include a Minimum Bill Report on a Customer Revenue Analysis, check the **Append Minimum Bill Report** checkbox on the **Compute Revenue for Account(s)** dialog box. To include a Minimum Bill Report on a Customer Impact Analysis, check the **Append Minimum Bill Report** checkbox on the **Customer Impact** dialog box.

Note: In order to include the Minimum Bill Report, you must include the MINIMUM_BILL_REPORT=1 parameter in the LODESTAR.CFG file. See **Chapter 2: Configuration Files** in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information.

Minimum Bill Report Processing

There are three main steps involved in processing a Minimum Bill Report.

- 1. Determining if the bill is a Minimum Bill,
- 2. Determining what Billing Determinants to display on the report (up to a maximum of 9), and
- 3. Determining what Revenue Values to display on the report (up to a maximum of 9).

These steps are performed in the rate schedule used to generate the Customer Revenue/Customer Impact analysis report in which the Minimum Bill Report is included. Each of these is described in detail below.

Determining if the bill is a Minimum Bill

Determining if a given bill is a minimum bill is performed through use of the **IF THEN** Rules Language Statement. Each rate schedule used to calculate minimum bills with the Customer Revenue and Customer Impact Analysis should have an "IF THEN" clause to determine if the bill should be a minimum bill. If the bill calculations meet (or fail to meet) a specified criteria, the bill is a minimum bill. For example:

```
IF $SUB_BILL > $MIN_BILL
THEN
BILLING_DEMAND = STANDARD_BD;
IGNORE $MIN_BILL, $MIN_BASE_CHARGE, $MIN_BILL_DEMAND_CHARGE;
ELSE
/* Minimum bill Report definition */
INCLUDE "MINBILL";
BILLING_DEMAND = MIN_BILL_BD;
IGNORE $SUB_BILL, $BASE_CHARGE, $STANDARD_DEMAND_CHARGE,
$ENERGY_CHARGE;
UNBILLED KWH, PK_KVA;
END IF;
```

If the bill is a minimum bill, the specific values to be included in the report are listed using a stem.component identifier (see **Record Identifiers (stem.component)** on page 4-14 in the *Rules Language User's Guide*) with the MIN_BILL_REPORT stem and specific values to be reported as components. For example,

MIN BILL REPORT.ENERGY = KWH;

In the example above, the MIN_BILL_REPORT identifiers are included in a rider (called MINBILL) that is included in the rate schedule using the INCLUDE Rules Language Statement. Using a rider to define the minimum bill report allows you to use the same values and definitions on all minimum bill ports by including the rider in the appropriate rate schedules.

Determining what Billing Determinants to display and in what order.

The MIN_BILL_REPORT identifiers are used determine what determinants will appear on the report. You can include up to nine (9) billing determinants in a single report. The order of the statements in the rate schedule or rider define where they are placed on the report.

For example:

MIN_BILL_REPORT.ENERGY = KWH; MIN_BILL_REPORT.PK_KW=PK_KW; MIN_BILL_REPORT.BILL_DEMAND=BILL_DEMAND;

These statements copy the values of the determinants into these MIN_BILL_REPORT identifiers where they will be retrieved by the report generator.

To give meaningful descriptions to the column headings, use the LABEL statement. For the above example, you could use the following LABEL statements:

LABEL MIN_BILL_REPORT.ENERGY "kWh"; LABEL MIN_BILL_REPORT.PK_KW "Peak kW"; LABEL MIN_BILL_REPORT.BILL_DEMAND "Bill Demand";

Determining what Revenue Values to display and in what order.

The MIN_BILL_REPORT identifiers are also used to determine what Revenue Values are displayed in the report. You can include up to nine (9) revenue values in a single report. The order in which they are defined in the rate schedule or riders determines the order that they will be placed in the report. Begin each MIN_BILL_REPORT identifiers with a dollar sign (\$) to have the revenue value appear with a dollar sign in the report.

For example:

```
MIN_BILL_REPORT.$MIN_BILL=$MIN_BILL;
MIN_BILL_REPORT.$EFFECTIVE_REVENUE=$EFFECTIVE_REVENUE;
LABEL MIN_BILL_REPORT.$MIN_BILL "Min_Bill";
LABEL MIN_BILL_REPORT.$EFFECTIVE_REVENUE "Total Revenue";
```

Important Note

In the rate schedule, the INCLUDE statement should be placed after all the values that will be calculated as part of the minimum bill have been calculated. For instance, if the minimum bill includes values for Energy, Bill Demand, Minimum Bill and Effective Revenue values, the INCLUDE statement must appear after those values have been calculated.

Sample Minimum Bill Report Rate Schedule and Rider

Below is a sample rate schedule and minimum bill report rider.

Rate Schedule

```
/* Calculate Minimum Monthly Bill */
$MIN_BILL = $MIN_BASE_CHARGE + MIN_BILL_DEMAND_CHARGE;
IF $SUB_BILL > $MIN_BILL
THEN
BILLING_DEMAND = STANDARD_BD;
IGNORE $MIN_BILL, $MIN_BASE_CHARGE, $MIN_BILL_DEMAND_CHARGE;
ELSE
    /* Minimum bill Report definition/
INCLUDE "MINBILLDTL";
BILLING_DEMAND = MIN_BILL_BD;
IGNORE $SUB_BILL, $BASE_CHARGE, $STANDARD_DEMAND_CHARGE,
$ENERGY_CHARGE;
UNBILLED KWH, PK_KVA;
END IF;
```

MINBILLDTL Rider

/* Large General Service Electric Service Min Bill Rider Detail Report $^{\star/}$

```
/* Minimum Bill Detail Report definition/
MIN_BILL_REPORT.ENERGY = KWH;
MIN_BILL_REPORT.PK_KW = PK_KW;
MIN_BILL_REPORT.BILLING_DET_1=BILLING_DEMAND;
LABEL MIN_BILL_REPORT.ENERGY "kWh";
LABEL MIN_BILL_REPORT.BILLING_DEPT_1 "Billing Demand";
MIN_BILL_REPORT.MIN_BILL_REV_CHG_1 = $MIN_BASE_CHARGE;
MIN_BILL_REPORT.MIN_BILL_REV_CHG_2 = $MIN_BILL_DEMAND_CHARGE;
MIN_BILL_REPORT.MIN_BILL = $MIN_BILL;
MIN_BILL_REPORT.MIN_BILL = $MIN_BILL;
MIN_BILL_REPORT.EFFECTIVE_REVENUE = $EFFECTIVE_REVENUE;
LABEL MIN_BILL_REPORT.MIN_REV_CHG_1 "Min_BASE_Charge";
LABEL_MIN_BILL_REPORT.MIN_REV_CHG_2 "Min_Bill_Demand_Charge";
LABEL_MIN_BILL_REPORT.MIN_REV_CHG_2 "Min_Bill_Demand_Charge";
LABEL_MIN_BILL_REPORT.MIN_REV_CHG_2 "Min_Bill_Demand_Charge";
LABEL_MIN_BILL_REPORT.MIN_BILL "Min_BILL";
MIN_BILL_REPORT.MIN_BILL "MIN_BILL";
MIN_BILL_REPORT.EFFECTIVE REVENUE "Total Revenue";
```

Sample Minimum Bill Report Output

At the end of the report the total number of minimum bill accounts will print. This number could be different from the number of minimum bills reported each month -- for example, if an account has 10 minimum bills, the account will be counted only once in the total at the end of the report, not 10 times. Each row will show the cumulative count of minimum bills. Below is a sample of a minimum bill report based on the sample rate schedule and rider above. Actual printed report may look slightly different that this example.

11/27/2000 MINIMUM BILL REPORT Page: 2

Computation Period: 03/1999 to 02/2000

Schedule: MPC LGS

		· _ · · ·						
YEAR MO #Min	Bi	lls kWh	Peak kW	Billing Demand	Min Bill	Min Base Chg	Min Bill Demand Chg	Total Revenue
1996 MAR	7	12854	239.6	44.5	1450.25	0.00	1450.25	1623.77
1996 APR	6	12760	204.6	55.0	1657.50	0.00	1657.50	1829.75
1996 MAY	2	13100	274.0	33.0	5530.25	0.00	5530.25	5707.09
1996 JUN	1	9800	593.0	25.0	4714.25	0.00	4714.25	4846.54
1996 JUL	4	15140	396.0	35.0	4874.25	0.00	4874.25	5078.62
1996 AUG	8	53580	568.0	66.6	5443.00	0.00	5443.00	6166.28
1996 SEP	3	14140	180.0	37.5	2362.25	0.00	2362.25	2553.12
1996 OCT	4	19740	326.0	25.5	3123.00	0.00	3123.00	3389.47
1996 NOV	2	18540	355.0	38.0	3123.00	0.00	3123.25	3373.28
1996 DEC	3	19940	249.0	26.5	2490.25	0.00	2490.25	2759.43
1997 JAN	2	11980	152.0	12.0	2034.25	0.00	2034.25	2195.97
1997 FEB	3	10026	81.0	10.5	2139.00	0.00	2139.00	2274.35
Total:	45	211600	3618.2	344.6	38941.25	0.00	38941.25	41797.67

THE NUMBER OF ACCOUNTS RECEIVING A MINIMUM BILL IS: 8

Chapter 11

Running the Hours Use Matrix Report

This chapter explains how to use the Hours Use Matrix Report. This report is a summary report that shows totals for revenue calculations.

- The Purpose of the Hours Use Matrix Report
- Running the Hours Use Matrix Report

The Purpose of the Hours Use Matrix Report

The Hours Use Matrix Report is a summary report that shows totals for revenue calculations. The report shows the comparison of the base or current rate to each proposed rate. A page of the report is created for each base rate to proposed rate comparison.

The details of each proposed rate comparisons are printed as an 8 by 8 matrix or array. The report data is grouped in the array slots based on each customers calculated hours use and demand (or hours use block). A separate section of the report called the Hours Use Comparison Report is created for each rate. The Hours Use Comparison Report section shows the Hours Use Matrix in a different format and includes the cumulative kWh and demand values.

Important Note: In order to use Hours Use Matrix report, you must include the HOURS_USE_REPORT=1 parameter in the LODESTAR.CFG file. See **Chapter 2: Configuration Files** in the *Oracle Utilities Energy Information Platform Configuration Guide* for more information.

The Hours Use Matrix report can also be run in batch mode using a command line program. For more information, see Hours Use Matrix on page B-19 of Appendix B: Setting Up Oracle Utilities Rate Management to run in Batch Mode.

Required Inputs

Before you can use the Hours Use Matrix report, you must have already created and saved the rate schedules and blockings you wish to use in the report. Note that the rate schedules used with the Hours Use Matrix report **must** use the \$EFFECTIVE_REVENUE identifier. Also, Demand is represented as kW. The rate schedules selected must use kWh and kW.

Energy and Demand Identifiers

Each rate schedule selected for use with the Hours Use Matrix Report must assign appropriate Energy and Demand values based on its billing energy and demand. These values are derived from specific rate schedule identifiers. The list below specifies the identifiers that should be used and their priorities. The program will search through this list to determine the Demand and Energy values to be used based on the identifiers used in the rate schedule. If none of the listed identifiers are found, an error message will print.

Priority	Energy Identifier
1	HOURS_USE_REPORT_ENERGY
2	KWH
3	CBL_KWH
Priority	Demand Identifier
1	HOURS_USE_REPORT_DEMAND
2	BILL_DEMAND
3	PK_KW
4	PK_KVA
5	CBL_BILL_DEMAND
6	BILLING_DEMAND

11-2 Rate Management User's Guide

Running the Hours Use Matrix Report

How to Run an Hours Use Matrix Report:

1. Select Analysis->Hours Use Matrix.

The Hours Use Matrix dialog box appears.

2. Select the Customers/Accounts for the report.

Select By: Choose either **Account** or **Customer**. **Select** the accounts or customers of interest using one of the following options:

- All: Select this option if you want to apply the analysis to all accounts or customers in the database.
- **ID:** Type the ID of one account or customer.
- List: Select the list that contains the IDs of the customers or accounts that you want to
 include in the analysis. If you believe that the contents of the list may have changed since
 the last time that the query associated with it was run, check the box for Refresh list
 before using. This option updates the list for this job and saves the new version of the
 list to the database, replacing the old version. See the Data Manager User's Guide for
 information about creating Customer and Account lists.
- 3. Specify the **Test Period From/To:** by entering the start- and end-month using the MM/ YYYY format.
- 4. Select the rate schedules to use in the report. Select the first rate schedule by first clicking the **Add** button.

The Select Rate Schedule and Optional Rate Code dialog box appears.

Select an Operating Company, Jurisdiction, and Rate Schedule.

Check one or more rate schedule **Types** (Current/Historical or Trial). Your selections here will determine which schedule types are displayed in the **Type** selection box (e.g., if you click just the **Trial** box, only those schedules stored as "Trial" will be available for selection in the selection box).

Highlight one rate schedule in the selection box.

To help you make your selection, Oracle Utilities Rate Management displays the first 50 lines of the selected rate schedule text in the lower window. If you wish to view the entire schedule (beyond 50 lines), click **Show All**. The text in this window is view-only—you cannot edit the schedule here.

If the rate schedule includes SELECT RATE CODE statements that apply different calculations for different rate codes, you must select one of the rate codes to be used in the analysis run. There are two options: select a rate code using the **From Rate Schedule Rate Code** drop-down list, o leave the **From Rate Schedule Rate Code** field empty. In the latter case, the report applies the first rate code in the schedule.

Click OK to return to the Hours Use Matrix dialog box.

Repeat this step as many times as needed to add comparison rate schedules. To update the rate schedule selection information, highlight the rate schedule you wish to change and select **Update**. To remove a rate schedule from the analysis, select **Delete**.

From the set of rate schedules, highlight the rate schedule you wish to use as the basis for comparison in the report. The other (non-highlighted) rate schedule(s) will be compared to the highlighted schedule.

Note: Each rate schedule selected must assign HOURS_USE_REPORT_ENERGY and HOURS_USE_REPORT_DEMAND.

- 5. Select the Demand Blocking and the Hours Range Blocking from the drop down lists. The blocking can contain at most 201 steps (-100 to 100 by 1, -500 to 500 by 5, etc.). The demand Blocking will represent how the demand (kW's) will be grouped. The hour range Blocking will represent how the hours use (kWh /kW) will be grouped. For more information on blocking, see Creating a New Blocking on page 2-3 of this manual.
- 6. *Optional.* If you want to override your default options for this report, click the **Options** button. See **Default Options** on page 1-8 for more information.
- 7. Click the **Report** button to run the report.

Sample Report

11/14/200	2	Hours U	se Matrix Rep	ort Input		Page: 1				
Computati	on Peri	od: 05/1993 to 0	5/1993							
Sche dul e	1	: GECO, SF,	1-ML, V 3							
Sche dule	2	: GECO, SF,	1-ML, V 7							
Sche dul e	3	: GECO, SF,	1-ML, V 8							
List Name		: OTT list 4		lt Season Nam	e: SEASON1					
Demand Bl	ocking	: OTN BILL R	ANGE							
Hours Ran	ge Bloc	king: OTN HOURS	USE 2							
			Page			-				
11/14/200	ż				Hour	s Use Matrix				Page :
Computati	on Peri	od: 05/1993 to 0	5/1993							
		, 3F, 1-ML, V 7 , 3F, 1-ML, V 8			¥	Range - Schedu	1- *			
			26- 50	51- 75						TOTALS
Bill BD R	ange	< - 25	26- 50	51- 75	76- 100	101- 400	401- 700	701- 1000	1001 - 99999	TOTALS
< -	25	0	0	8	0	Ş.	0	Q.	0	8
< Change		0.00 *	0.00+	0.00 %	0.00+	0.00+	0.00+	0.00+	0.00+	0.00+
Max ł		0.00*	0.00*	0.00+	0.00*	0.004	0.00+	0.00+	0.00+	0.004
Min ł		0.00*	0.00*	0.00+	0.00*	0.004	0.00+	0.00+	0.00+	0.00*
\$ Change		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
26-	50	0	0	\$	Û	<u>0</u> .	\$	<u>0</u> .	\$	Ŷ
< Change		0.00÷	0.00+	0.00+	0.00+	0.00+	0.00+	0.00+	0.00 -	0.00*
Max ł		0.00 ->	0.00+	0.00 ->	0.00+	0.00+	0.007	0.00+	0.00 ->	0.00+
Min ł		0.00+	0.00+	0.00+	0.007	0.00+	0.007	0.00÷	0.00 ÷	0.00+
\$ Change		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
51-	75	0	8	Q.	\$	<u>0</u> .	\$	9.	\$	8
< Change		0.00 *	0.00%	0.00 *	0.004	0.00+	0.004	0.00+	0.00+	0.00*
Max +		0.00+	0.00%	0.00 -	0.004	0.00+	0.004	0.00+	0.00+	0.00*
		0.00+	0.005	0.00 %	0.005	0.005	0.005	0.003		
Min + \$ Change		\$0.004	0.004 \$0.00	50.00-	50.00	50.00	50.00	50.004	0.00÷ \$0.00	0.00+ \$0.00

Appendix A

Mapping Rate Codes Between Rate Schedules

The Interschedule Mapping Table defines "equivalencies" between rate codes in different rate schedules. This features makes it possible to substitute the "best" rate code for a customer when comparing different rate schedules, such as when applying Oracle Utilities Rate Management's Customer Impact Analysis or Oracle Utilities Billing Component's Trial Bill Calculation.

Purpose of the Interschedule Mapping Table

The Interschedule Mapping Table enables you to "pair" a rate code in one rate schedule with the most similar rate code in a second rate schedule.

This feature is useful when performing "what if" bill calculations or revenue analysis that apply rate schedules with rate code-dependent charges to customers currently on a different rate schedule/rate code.

For example, imagine that you want to find the result of applying your company's General Service rate to a customer currently on an Industrial rate. Further, say that the general service rate includes two different customer charges—one for customers on rate code GS-1 and another for customers on GS-2 (these charges are specified in the rate form using the SELECT RATE CODE statements). If the customer's current rate code is anything other than GS-1 or GS-2, the trial calculations will skip the customer charges entirely. However, if you map the industrial rate code to, say, the GS1 code in the Interschedule Mapping Table, the analysis program will apply the charges associated with GS1 when calculating the customer's trial bill or revenue.

The Interschedule Mapping Table is stored in the Oracle Utilities Data Repository, where it is available for use with the Oracle Utilities Billing Component, Oracle Utilities Rate Management, and other analysis programs. You must use the Data Manager Browser to add, update, or delete entries in the table.

Some Important Rules for Mapping Codes

Important points to keep in mind when defining rate code mappings include:

- You can map a rate code to just one rate code in the second rate schedule (in other words, one rate code in the first schedule cannot be paired with multiple rate codes in the second schedule), however...
- You can map more than one rate code in the first schedule to the same rate code in the second schedule.
- Oracle Utilities Rate Management's Customer Impact Analysis automatically uses the mappings defined in the Interschedule Mapping Table.

Mapping Rate Codes

How to map a Rate Code:

1. Select File->Browse->Customer Database.

The Browser appears.

2. Using the *right* mouse button, click the **Inter-Schedule Mappings** Table and the select **Insert New**.

A blank data entry form appears in the right pane.

3. Complete the form:

Rate Code: Click anywhere in this field to make the Select Rate Code list appear.

This is a list of all rate schedules and rate codes currently stored in the Oracle Utilities Data Repository. If the list is very long, you can use the search tools at the top of the window to locate the desired rate code.

Highlight the desired rate schedule/rate code and click **OK**. Your selection appears in the Browser's data entry form.

Mapped Rate Code: This is the Rate Code you want to map to the first rate schedule/rate code selection. Use the same process as described above.

4. To save the mapping, select **Edit-**>**Add**, or click the *right* mouse button and select **Add**.

Note: Your new mapping appears in the left pane of the Browser.

5. Repeat steps 2 through 4 for as many mappings as you wish to create. When you have finished, click **File->Close**.

Appendix B

Setting Up Oracle Utilities Rate Management to run in Batch Mode

This chapter describes how to set up Oracle Utilities Rate Management to run in batch mode, including:

- Customer Impact
- Customer Revenue
- Bill Frequency
- Typical Bill
- Crossing Point
- Hours Use Matrix

Customer Impact

You can run Customer Impact in batch mode using the CUSTIMPACT.EXE command line program.

CUSTIMPACT Command Syntax

The command to run CUSTIMPACT uses the syntax shown below. Parameter switches are case insensitive; you can enter them in either upper or lower case (-c or -C). If a parameter includes a space, you must enclose it in quotes (for example, -s "11/01/1999 12:00:00"). Also, when you enter the command, you must either supply the path to the program, or run it from the directory in which it is stored (typically, \LODESTAR\BIN).

CustImpact -c connectstring [-q qualifier] [-f configilename] -v OPCO:JUR:RS[:VER]:[:RC] [-s startdate] [-t stopdate] [-a (a | c)(a | i | l [*] | f) name] [-b intdb] [-w outputname] [-k saveresults] [-i# intervaldatahandling] [-rp reportoptions] [-rop reportoptions] [-m minimum bill] [-n advanced analysis name] [-z## advanced \$ diff absolute range] [-y advanced % diff] [-g advanced rpt all customer] [-h advanced report all over threshold] [-jname advanced savinglist name] [-k best rate] [-oname advanced blocking name] [-lcfg logging configuration filename]

In actual use, the command must be entered on one line. Also, you must either change to the directory in which the program is stored (typically, \LODESTAR\bin) before entering the command, or specify the path in the command. To view a list of all parameters on-screen, type **custimpact -?** at the command prompt.

Parameter	Description
-C	<i>connectstring</i> is database connection information for the Oracle Utilities Data Repository. This parameter is required and must be in one of the following formats:
	For Oracle databases:
	"Data Source= <data_source>;User ID=<user_id>;Password=<password>;LSProvider=ODP;"</password></user_id></data_source>
	 <data_source> is the Oracle TNS Name for the data source, from the TNS_NAMES.ora file (typically located in the \\<machine>\oracle\network\admin directory)</machine></data_source>
	• <user_id> is the user ID for the database connection</user_id>
	• <password> is the password for the supplied user ID.</password>
-q	qualifier is an optional database qualifier. The default is PWRLINE.
-f	<i>configfilename</i> is the name of the configuration file that defines the working environment of the Oracle Utilities software (directs the software where to find and place the application data files, and so on). If you do not supply a value for <i>configfilename</i> , the system uses the default (LODESTAR.CFG). See Chapter 2 : Configuration Files in the <i>Oracle Utilities Energy Information Platform Configuration Guide</i> for more information about this file.

Parameter	Description
-v	<i>OPCO:JUR:RS</i> [: <i>VER</i>][:RC] is the identifier for the rate form. It is required (except when you supply an account ID/list using the -a switch, and corresponding records exist in the Rate Code History table). OPCO, JUR, RS are the operating company code, jurisdiction code, and rate form code (respectively) that identify the rate form. You can specify a NULL operating company or jurisdiction by leaving blank space where OPCO or JUR would be. The version number is optional. If you do not supply a version number the program automatically uses the rate form that was applicable on the stop date of the analysis period (specified using the -t switch). If you supply a version number, the program uses the trial version indicated (you would typically do this for testing). RC is the Rate Code if one is used. This is optional. See the <i>Data Manager User's Guide for</i> additional information about this convention for identifying rate forms.
-5	A start-date value is <i>required</i> . You can use any of the following formats Explicit Dates <i>mm/dd/yyyy hh:mm:ss</i> or <i>yyyy-mm-dd hh:mm:ss</i> Absolute value for date and time of the period's beginning. The time (hh:mm:ss) is optional, and defaults to midnight.
	mm/dd/yyyy-hh:mm Alternate, acceptable format (used by Oracle Utilities Load Analysis). I this format is used, times are adjusted. As start time of 00:01 will automatically be changed to 00:00:00, and a stop time of 24:00 will become 23:59:59
	 Relative Dates D## You can specify a relative date in days, where ## is the number of days before the current date and time, beginning at midnight (the "current date and time" are the date and time when the RUNRS job starts). D0 represents the current date, beginning at midnight. D3 represents three days previous, beginning at midnight. M# You can specify a relative date in months, where # is the number of calendar months before the month containing the current date, starting at midnight on the first of the month. M0 is the current month, beginning on the 1st at midnight ("current date" refers to the date when the RUNRS job starts). Note: mm, dd, and yyyy are all numeric. If you supply the time, you must enclose the parameter in double quotes, because the date and time are

Parameter	Description					
-t	A stoptime value is optional. You can use any of the following formats:					
	Explicit Dates mm/dd/yyyy hh:mm:ss or yyyy-mm-dd hh:mm:ss Absolute value for date and time of the period's beginning. Time is optional; midnight is the default. mm/dd/yyyy-hh:mm Alternate, acceptable format (used by Oracle Utilities Load Analysis). If this format is used, times are adjusted. A start time of 00:01 will automatically be changed to 00:00:00, and a stop time of 24:00 will become 23:59:59.					
	 M# You can specify a relative date in months, where # is the number of calendar months after the month containing the current date, starting at midnight on the first of the month. M0 is the current month beginning on the 1st at midnight. (Again, "current date" refers to the date when the RUNRS job starts.) Note: mm, dd, and yyyy are all numeric. If you supply the time, you must enclose the parameter in double-quotes, because the date and time are separated with a space; for example, "11/18/1998 01:00:00" 					
-a	 (a c)(a i l [*] f)name Account/Customer All/Id/List/File name. The default is no account. An * immediately after l means refresh the list. If -aaf is specified, the file must be one of the following: 					
	 a list of customer/account IDs (*.ids) 					
	• a list file (*.lst)					
	• an account query file (*.qra)					
	• a customer query file (*.qrc).					
	Examples: • All Accounts: -aaa					
	• Account ID: -aai555888					
	Account List: -aalMAC_RUNRS_ACCTLIST					
	• Account ID File: -aafMAC_RUNRS_ACCTFILE.ids. This file exists in the specified user directory (defined on the User Files tak of the Default Options dialog)					

Parameter	Description			
-b	<i>filename</i> is the name of the Interval Database that contains the interval data for the calculations. The default is selected via the Interval Data Source tab on the General Options dialog.			
	A file name that is simply RDB specifies the interval data table selected on the Interval Data Sources tab on the Default Options Data Manager dialog (see Interval Data Source on page 2-12 in the <i>Data Manager</i> <i>User's Guide</i>).			
-W	<i>filename</i> is the name that the program assigns to the output reports. If you do not supply this option, the program displays the output on screen and does not produce a file.			
-i#	Set interval data handling. Same values as INTD_ERROR_STOP (0,1,2,3). Default # is 1 (error stop). If not set, the On Rules Language Interval Data Error option specified on the Error Handling tab of the General Options dialog is used.			
-rp	Turn on all Report Options - Problem Determination.			
-rop	<i>eibr</i> Any combination of e i b r. Sets Report Options - Problem Determination. Turn on Error Messages, Input options, Show Bill History, Show Rate Schedule.			
-rogs	Display summaries only. Sets Report Options – General Options. Turns on the Display Summaries Only option			
-m	Append Minimum Bill – Turns on the Minimum Bill Report			
-lcfg	<i>logging configuration filename</i> Name of an optional logging configuration file that specifies where error and log messages are sent. If you omit this parameter, the application creates a log file named RUNRS.LOG in the LOG directory.			
Advanced Cu	ustomer Impact Inputs — Optional			
-n	Analysis Name: Optional. Type a name to appear in the report window's title bar.			
-z##	Switch Threshold - \$ Difference Absolute Range. Supply a dollar value If you use this option, the program will flag customers with a dollar difference between revenue from the base rate schedule and revenue from any of the other rate schedules greater than the amount you supplied (for the entire test period). This value is divided by the number of months in the test period and the result is used as the absolute comparison value for each month; the input value is used as the comparison value for the total of all months.			
-y##	Switch Threshold - % Difference - Percent Diff. Supply a percent value If you use this option, Customer Impact flags customers with a percen difference between revenue from the base rate schedule and revenue from any of the other rate schedules greater than the amount you supplied (total difference is compared, not monthly difference).			

Switch Threshold Reports - If you selected any switch threshold
options, you can choose All Customers if you don't want to limit the
output.

-g

Parameter	Description
-h	Switch Threshold Reports - Reports If you selected any switch threshold options, you can choose All Over Threshold if you want to report just those customers that may switch to another rate schedule.
-j	<i>name</i> Switch Threshold Saving List Name - If you want the program to create a list of the customers who may switch to another rate schedule, enter a name for the list here using the –j parameter.
-k	Switch Threshold - Assign each customer to its best rate's list. Use this switch (if you want the program to create a list for each rate (the list name is the supplied list prefix appended with the rate schedule name). A customer will be added to a rate list if the customer's bill is the minimum on that rate (ties go to the first rate with the minimum).
-0	<i>name</i> Billing Impact Frequency Report - Blocking Name. If you use this switch, a Billing Impact Frequency Report page will be appended to the Customer Impact Report. You must select a blocking to use in creating this report. The blocking can contain at most 201 steps (-100 to 100 by 1,-500 to 500 by 5, etc.). Enter the blocking name after the –o parameter. Example: -o"0 - 500 by 100"

Command Line Example:

C:\lodestar\bin\CustImpact -cdsn1 -uuserid -ppassword aclDDC_G_IND_500kW_Commparison wd:\powrline\user\custimp\cstimpminbill.txt -s"01/01/2003" -t"12/31/ 2003" -v"GPC:GA:GPC_G-10:401:018" -v"GPC:GA:GPC_PLL-2:401:005" v"GPC:GA:GPC_TOU-GSD:403:008" -z150 -m -n"0 - 500 by 100" -ros f"d:\lodestar.cfg"

Customer Revenue

You can run Customer Revenue in batch mode using the CUSTREVENUE.EXE command line program.

CUSTREVENUE Command Syntax

The command to run CUSTREVENUE uses the syntax shown below. Parameter switches are case insensitive; you can enter them in either upper or lower case (-c or -C). If a parameter includes a space, you must enclose it in quotes (for example, -s "11/01/1999 12:00:00"). Also, when you enter the command, you must either supply the path to the program, or run it from the directory in which it is stored (typically, \LODESTAR\BIN).

CustRevenue - c connectstring [-**q** qualifier] [-**f** configfilename] -**v** OPCO:JUR:RS[:VER]:[:RC] [-**s** startdate] [-**t** stopdate] [-**a** (a | c)(a | i | l [*] | f) name] [-**b** intdb] [-**w** outputname] [-**i#** intervaldatahandling] [-**rp** reportoptions] [-**rop** reportoptions]

In actual use, the command must be entered on one line. Also, you must either change to the directory in which the program is stored (typically, \LODESTAR\bin) before entering the command, or specify the path in the command. To view a list of all parameters on-screen, type **custrevenue -?** at the command prompt.

Parameter	Description
-c	<i>connectstring</i> is database connection information for the Oracle Utilities Data Repository. This parameter is required and must be in one of the following formats:
	For Oracle databases:
	"Data Source= <data_source>;User ID=<user_id>;Password=<password>;LSProvider=ODP;"</password></user_id></data_source>
	 <a href="mailto: <a href=" li="" mailto:<=""> <a a="" href="mailto: <a href=" mailto:<=""> <
	• <user_id> is the user ID for the database connection</user_id>
	• <password> is the password for the supplied user ID.</password>
-q	qualifier is an optional database qualifier. The default is PWRLINE.
-f	<i>configfilename</i> is the name of the configuration file that defines the working environment of the Oracle Utilities software (directs the software where to find and place the application data files, and so on). If you do not supply a value for <i>configfilename</i> , the system uses the default (LODESTAR.CFG). See Chapter 2 : Configuration Files in the <i>Oracle Utilities Energy Information Platform Configuration Guide</i> for more information about this file.

Parameter	Description
-2	(a c)(a i l [*] f)name Account/Customer All/Id/List/File name. The default is no account. An * immediately after l means refresh the list.
	If -aaf is specified, the file must be one of the following:a list of customer/account IDs (*.ids)
	• a list file (*.lst)
	• an account query file (*.qra)
	• a customer query file (*.qrc).
	Examples: • All Accounts: -aaa
	• Account ID: -aai555888
	Account List: -aalMAC_RUNRS_ACCTLIST
	• Account ID File: -aafMAC_RUNRS_ACCTFILE.ids. This file exists in the specified user directory (defined on the User Files tab of the Default Options dialog)
-b	<i>filename</i> is the name of the Interval Database that contains the interval data for the calculations. The default is selected via the Interval Data Source tab on the General Options dialog.
	A file name that is simply RDB specifies the interval data table selected on the Interval Data Sources tab on the Default Options Data Manager dialog (see Interval Data Source on page 2-12 in the <i>Data Manager</i> <i>User's Guide</i>).
-W	<i>filename</i> is the name that the program assigns to the output reports. If you do not supply this option, the program displays the output on screen and does not produce a file.
-i#	Set interval data handling. Same values as INTD_ERROR_STOP (0,1,2,3). Default # is 1 (error stop). If not set, the On Rules Language Interval Data Error option specified on the Error Handling tab of the General Options dialog is used.
-rp	Turn on all Report Options - Problem Determination.
-rop	<i>eibr</i> Any combination of e i b r. Sets Report Options - Problem Determination. Turn on Error Messages, Input options, Show Bill History, Show Rate Schedule.
-rogs	Display summaries only. Sets Report Options – General Options. Turns on the Display Summaries Only option

Parameter	Description
-V	<i>OPCO:JUR:RS</i> [: <i>VER</i>][:RC] is the identifier for the rate form. It is required (except when you supply an account ID/list using the -a switch, and corresponding records exist in the Rate Code History table). OPCO, JUR, RS are the operating company code, jurisdiction code, and rate form code (respectively) that identify the rate form. You can specify a NULL operating company or jurisdiction by leaving a blank space where OPCO or JUR would be. The version number is optional. If you do not supply a version number, the program automatically uses the rate form that was applicable on the stop date of the analysis period (specified using the -t switch). If you supply a version number, the program uses the trial version indicated (you would typically do this for testing). RC is the Rate Code if one is used. This is optional. See the <i>Data Manager User's Guide for</i> additional information about this convention for identifying rate forms.
-S	From test period Bill month. MM/YYYY format
-t	To test period Bill month. MM/YYYY format

Bill Frequency

You can run Bill Frequency in batch mode using the BILLFREQUENCY.EXE command line program.

BILLFREQUENCY Command Syntax

The command to run BILLFREQUENCY uses the syntax shown below. Parameter switches are case insensitive; you can enter them in either upper or lower case (-c or -C). If a parameter includes a space, you must enclose it in quotes (for example, -s "11/01/1999 12:00:00"). Also, when you enter the command, you must either supply the path to the program, or run it from the directory in which it is stored (typically, \LODESTAR\BIN).

BillFrequency -c connectstring [-q qualifier] [-f configfilename] -v OPCO:JUR:RS[:VER]:[:RC] [-s startdate] [-t stopdate] [-a (a | c)(a | i | l [*] | f) name] [-b intdb] [-w outputname] [-i# intervaldatahandling] [-rp reportoptions] [-rop reportoptions] [-n Analysis Name] [-e Bill frequency table name]

In actual use, the command must be entered on one line. Also, you must either change to the directory in which the program is stored (typically, \LODESTAR\bin) before entering the command, or specify the path in the command. To view a list of all parameters on-screen, type **billfrequency -?** at the command prompt.

Parameter	Description
-C	<i>connectstring</i> is database connection information for the Oracle Utilities Data Repository. This parameter is required and must be in one of the following formats:
	For Oracle databases:
	"Data Source= <data_source>;User ID=<user_id>;Password=<password>;LSProvider=ODP;"</password></user_id></data_source>
	 vhere: <data_source> is the Oracle TNS Name for the data source, from the TNS_NAMES.ora file (typically located in the \\<machine>\oracle\network\admin directory)</machine></data_source>
	• <user_id> is the user ID for the database connection</user_id>
	• <password> is the password for the supplied user ID.</password>
-q	qualifier is an optional database qualifier. The default is PWRLINE.
-f	<i>configfilename</i> is the name of the configuration file that defines the working environment of the Oracle Utilities software (directs the software where to find and place the application data files, and so on). If you do not supply a value for <i>configfilename</i> , the system uses the default (LODESTAR.CFG). See Chapter 2: Configuration Files in the <i>Oracle Utilities Energy Information Platform Configuration Guide</i> for more information about this file.

Parameter	Description
-a	(a c)(a i l [*] f)name Account/Customer All/Id/List/File name. The default is no account. An * immediately after l means refresh the list.
	If -aaf is specified, the file must be one of the following:a list of customer/account IDs (*.ids)
	• a list file (*.lst)
	• an account query file (*.qra)
	• a customer query file (*.qrc).
	Examples: • All Accounts: -aaa
	• Account ID: -aai555888
	Account List: -aalMAC_RUNRS_ACCTLIST
	 Account ID File: -aafMAC_RUNRS_ACCTFILE.ids. This file exists in the specified user directory (defined on the User Files tal of the Default Options dialog)
-b	<i>filename</i> is the name of the Interval Database that contains the interval data for the calculations. The default is selected via the Interval Data Source tab on the General Options dialog.
	A file name that is simply RDB specifies the interval data table selected on the Interval Data Sources tab on the Default Options Data Manage dialog (see Interval Data Source on page 2-12 in the <i>Data Manager</i> <i>User's Guide</i>).
-W	<i>filename</i> is the name that the program assigns to the output reports. If you do not supply this option, the program displays the output on screen and does not produce a file.
-i#	Set interval data handling. Same values as INTD_ERROR_STOP (0,1,2,3). Default # is 1 (error stop). If not set, the On Rules Language Interval Data Error option specified on the Error Handling tab of the General Options dialog is used.
-rp	Turn on all Report Options - Problem Determination.
-rop	<i>eibr</i> Any combination of $e i b r$. Sets Report Options - Problem Determination. Turn on Error Messages, Input options, Show Bill History, Show Rate Schedule.
-rogs	Display summaries only. Sets Report Options – General Options. Turns on the Display Summaries Only option

Parameter	Description
-V	<i>OPCO:JUR:RS</i> [: <i>VER</i>][:RC] is the identifier for the rate form. It is required (except when you supply an account ID/list using the -a switch, and corresponding records exist in the Rate Code History table). OPCO, JUR, RS are the operating company code, jurisdiction code, and rate form code (respectively) that identify the rate form. You can specify a NULL operating company or jurisdiction by leaving a blank space where OPCO or JUR would be. The version number is optional. If you do not supply a version number, the program automatically uses the rate form that was applicable on the stop date of the analysis period (specified using the -t switch). If you supply a version number, the program uses the trial version indicated (you would typically do this for testing). RC is the Rate Code if one is used. This is optional. See the <i>Data Manager User's Guide for</i> additional information about this convention for identifying rate forms.
-S	From test period Bill month. MM/YYYY format
-t	To test period Bill month. MM/YYYY format
-n	<i>Optional.</i> Analysis Name. This will appear on top of the report. This parameter is for Revenue
-е	Bill frequency table name. This parameter is for revenue.

Typical Bill

You can run Typical Bill in batch mode using the TYPICALBILL.EXE command line program.

TYPICALBILL Command Syntax

The command to run TYPICALBILL uses the syntax shown below. Parameter switches are case insensitive; you can enter them in either upper or lower case (-c or -C). If a parameter includes a space, you must enclose it in quotes (for example, -s "11/01/1999 12:00:00"). Also, when you enter the command, you must either supply the path to the program, or run it from the directory in which it is stored (typically, \LODESTAR\BIN).

Typicalbill -c connectstring [-q qualifier] [-f configfilename] -v OPCO:JUR:RS[:VER]:[:RC] [-s billmonth] [-a (a | c)(a | i | l [*] | f) name] [-b intdb] [-w outputname] [-i# intervaldatabandling] [-rp reportoptions] [-rop reportoptions] [-p compute cents] [-d Determinant and values]

In actual use, the command must be entered on one line. Also, you must either change to the directory in which the program is stored (typically, \LODESTAR\bin) before entering the command, or specify the path in the command. To view a list of all parameters on-screen, type **typicalbill -?** at the command prompt.

Parameter	Description
-C	<i>connectstring</i> is database connection information for the Oracle Utilities Data Repository. This parameter is required and must be in one of the following formats:
	For Oracle databases:
	"Data Source= <data_source>;User ID=<user_id>;Password=<password>;LSProvider=ODP;"</password></user_id></data_source>
	 <a a="" href="mailto: <a href=" mailto:<=""> <a< td=""></a<>
	• <user_id> is the user ID for the database connection</user_id>
	• <password> is the password for the supplied user ID.</password>
-q	qualifier is an optional database qualifier. The default is PWRLINE.
-f	<i>configfilename</i> is the name of the configuration file that defines the working environment of the Oracle Utilities software (directs the software where to find and place the application data files, and so on). If you do not supply a value for <i>configfilename</i> , the system uses the default (LODESTAR.CFG). See Chapter 2 : Configuration Files in the <i>Oracle Utilities Energy Information Platform Configuration Guide</i> for more information about this file.

Parameter	Description
-a	(a c)(a i l [*] f)name Account/Customer All/Id/List/File name. The default is no account. An * immediately after l means refresh the list.
	If -aaf is specified, the file must be one of the following:a list of customer/account IDs (*.ids)
	• a list file (*.lst)
	• an account query file (*.qra)
	• a customer query file (*.qrc).
	Examples: • All Accounts: -aaa
	• Account ID: -aai555888
	Account List: -aalMAC_RUNRS_ACCTLIST
	• Account ID File: -aafMAC_RUNRS_ACCTFILE.ids. This file exists in the specified user directory (defined on the User Files tak of the Default Options dialog)
-b	<i>filename</i> is the name of the Interval Database that contains the interval data for the calculations. The default is selected via the Interval Data Source tab on the General Options dialog.
	A file name that is simply RDB specifies the interval data table selected on the Interval Data Sources tab on the Default Options Data Manage dialog (see Interval Data Source on page 2-12 in the <i>Data Manager</i> <i>User's Guide</i>).
-W	<i>filename</i> is the name that the program assigns to the output reports. If you do not supply this option, the program displays the output on screen and does not produce a file.
-i#	Set interval data handling. Same values as INTD_ERROR_STOP (0,1,2,3). Default # is 1 (error stop). If not set, the On Rules Language Interval Data Error option specified on the Error Handling tab of the General Options dialog is used.
-rp	Turn on all Report Options - Problem Determination.
-rop	<i>eibr</i> Any combination of e i b r. Sets Report Options - Problem Determination. Turn on Error Messages, Input options, Show Bill History, Show Rate Schedule.
-rogs	Display summaries only. Sets Report Options – General Options. Turns on the Display Summaries Only option

Parameter	Description
-V	 OPCO:JUR:RS[:VER][:RC] is the identifier for the rate form. It is required (except when you supply an account ID/list using the -a switch, and corresponding records exist in the Rate Code History table). OPCO, JUR, RS are the operating company code, jurisdiction code, and rate form code (respectively) that identify the rate form. You can specify a NULL operating company or jurisdiction by leaving a blank space where OPCO or JUR would be. The version number is optional. If you do not supply a version number, the program automatically uses the rate form that was applicable on the stop date of the analysis period (specified using the -t switch). If you supply a version number, the program uses the trial version indicated (you would typically do this for testing). RC is the Rate Code if one is used. This is optional. See the <i>Data Manager User's Guide for</i> additional information about this convention for identifying rate forms.
-S	Bill month. MM/YYYY format
-р	Compute Cents per determinant name.
-d	Determinant and values. More than one can be specified: -dDET, LOW, HIGH, STEP Example : -dKWH,0,100,10

Crossing Point

You can run Crossing Point in batch mode using the CROSSINGPOINT.EXE command line program.

CROSSINGPOINT Command Syntax

The command to run CROSSINGPOINT uses the syntax shown below. Parameter switches are case insensitive; you can enter them in either upper or lower case (-c or -C). If a parameter includes a space, you must enclose it in quotes (for example, -s "11/01/1999 12:00:00"). Also, when you enter the command, you must either supply the path to the program, or run it from the directory in which it is stored (typically, \LODESTAR\BIN).

CrossingPoint -c connectstring [-q qualifier] [-f configfilename] -v OPCO:JUR:RS[:VER]:[:RC] [-s billmonth] [-t minimum difference] [-e determinant codes] [-n determinant index] [-a $(a | c)(a | i | l^*] | f)$ name] [-b intdb] [-w outputname] [-i# intervaldatabandling] [-rp reportoptions] [-rop reportoptions]

In actual use, the command must be entered on one line. Also, you must either change to the directory in which the program is stored (typically, \LODESTAR\bin) before entering the command, or specify the path in the command. To view a list of all parameters on-screen, type **crossingpoint -?** at the command prompt.

Parameter	Description
-C	<i>connectstring</i> is database connection information for the Oracle Utilities Data Repository. This parameter is required and must be in one of the following formats:
	For Oracle databases:
	"Data Source= <data_source>;User ID=<user_id>;Password=<password>;LSProvider=ODP;"</password></user_id></data_source>
	 vhere: <data_source> is the Oracle TNS Name for the data source, from the TNS_NAMES.ora file (typically located in the \\<machine>\oracle\network\admin directory)</machine></data_source>
	• <user_id> is the user ID for the database connection</user_id>
	• <password> is the password for the supplied user ID.</password>
-q	qualifier is an optional database qualifier. The default is PWRLINE.
-f	<i>configfilename</i> is the name of the configuration file that defines the working environment of the Oracle Utilities software (directs the software where to find and place the application data files, and so on). If you do not supply a value for <i>configfilename</i> , the system uses the default (LODESTAR.CFG). See Chapter 2: Configuration Files in the <i>Oracle Utilities Energy Information Platform Configuration Guide</i> for more information about this file.

Parameter	Description
-a	(<i>a</i> <i>c</i>)(<i>a</i> <i>i</i> <i>l</i> [*][<i>f</i>) <i>name</i> Account/Customer All/Id/List/File name. The default is no account. An * immediately after 1 means refresh the list.
	If -aaf is specified, the file must be one of the following:a list of customer/account IDs (*.ids)
	• a list file (*.lst)
	• an account query file (*.qra)
	• a customer query file (*.qrc).
	Examples: • All Accounts: -aaa
	• Account ID: -aai555888
	Account List: -aalMAC_RUNRS_ACCTLIST
	• Account ID File: -aafMAC_RUNRS_ACCTFILE.ids. This file exists in the specified user directory (defined on the User Files tal of the Default Options dialog)
-b	<i>filename</i> is the name of the Interval Database that contains the interval data for the calculations. The default is selected via the Interval Data Source tab on the General Options dialog.
	A file name that is simply RDB specifies the interval data table selected on the Interval Data Sources tab on the Default Options Data Manage dialog (see Interval Data Source on page 2-12 in the <i>Data Manager</i> <i>User's Guide</i>).
-W	<i>filename</i> is the name that the program assigns to the output reports. If you do not supply this option, the program displays the output on screen and does not produce a file.
-i#	Set interval data handling. Same values as INTD_ERROR_STOP (0,1,2,3). Default # is 1 (error stop). If not set, the On Rules Language Interval Data Error option specified on the Error Handling tab of the General Options dialog is used.
-rp	Turn on all Report Options - Problem Determination.
-rop	<i>eibr</i> Any combination of e i b r. Sets Report Options - Problem Determination. Turn on Error Messages, Input options, Show Bill History, Show Rate Schedule.
-rogs	Display summaries only. Sets Report Options – General Options. Turns on the Display Summaries Only option

Parameter	Description
-V	<i>OPCO:JUR:RS</i> [: <i>VER</i>][:RC] is the identifier for the rate form. It is required (except when you supply an account ID/list using the -a switch, and corresponding records exist in the Rate Code History table). OPCO, JUR, RS are the operating company code, jurisdiction code, and rate form code (respectively) that identify the rate form. You can specify a NULL operating company or jurisdiction by leaving a blank space where OPCO or JUR would be. The version number is optional. If you do not supply a version number, the program automatically uses the rate form that was applicable on the stop date of the analysis period (specified using the -t switch). If you supply a version number, the program uses the trial version indicated (you would typically do this for testing). RC is the Rate Code if one is used. This is optional. See the <i>Data Manager User's Guide for</i> additional information about this convention for identifying rate forms.
-S	Bill month. MM/YYYY format
-t	Minimum difference (double value)
-е	Determinant codes for KWH, KW and <load factor="">, respectively: -eKWH, KW,<load factor=""></load></load>
-n	Determinant index (0,1, or 2). This is used only if -e is specified.

Hours Use Matrix

You can run Hours Use Matrix in batch mode using the HOURSUSEMATRIX.EXE command line program.

HOURSUSEMATRIX Command Syntax

The command to run HOURSUSEMATRIX uses the syntax shown below. Parameter switches are case insensitive; you can enter them in either upper or lower case (-c or -C). If a parameter includes a space, you must enclose it in quotes (for example, -s "11/01/1999 12:00:00"). Also, when you enter the command, you must either supply the path to the program, or run it from the directory in which it is stored (typically, \LODESTAR\BIN).

HoursUseMatrix -c connectstring [-q qualifier] [-f configfilename] -v OPCO:JUR:RS[:VER]:[:RC] [-s startdate] [-t stopdate] [-a (a | c)(a | i | l [*] | f) name] [-b intdb] [-w outputname] [-i# intervaldatahandling] [-rp reportoptions] [-rop reportoptions] [-I Blocking names]

In actual use, the command must be entered on one line. Also, you must either change to the directory in which the program is stored (typically, \LODESTAR\bin) before entering the command, or specify the path in the command. To view a list of all parameters on-screen, type **hoursusematrix** -? at the command prompt.

Parameter	Description
-C	<i>connectstring</i> is database connection information for the Oracle Utilities Data Repository. This parameter is required and must be in one of the following formats:
	For Oracle databases:
	"Data Source= <data_source>;User ID=<user_id>;Password=<password>;LSProvider=ODP;"</password></user_id></data_source>
	 <data_source> is the Oracle TNS Name for the data source, from the TNS_NAMES.ora file (typically located in the \\<machine>\oracle\network\admin directory)</machine></data_source>
	• <user_id> is the user ID for the database connection</user_id>
	• <password> is the password for the supplied user ID.</password>
-q	qualifier is an optional database qualifier. The default is PWRLINE.
-f	<i>configfilename</i> is the name of the configuration file that defines the working environment of the Oracle Utilities software (directs the software where to find and place the application data files, and so on). If you do not supply a value for <i>configfilename</i> , the system uses the default (LODESTAR.CFG). See Chapter 2 : Configuration Files in the <i>Oracle Utilities Energy Information Platform Configuration Guide</i> for more information about this file.

Parameter	Description
-a	(<i>a</i> <i>c</i>)(<i>a</i> <i>i</i> <i>l</i> [*][<i>f</i>) <i>name</i> Account/Customer All/Id/List/File name. The default is no account. An * immediately after 1 means refresh the list.
	If -aaf is specified, the file must be one of the following:a list of customer/account IDs (*.ids)
	• a list file (*.lst)
	• an account query file (*.qra)
	• a customer query file (*.qrc).
	Examples: • All Accounts: -aaa
	• Account ID: -aai555888
	Account List: -aalMAC_RUNRS_ACCTLIST
	• Account ID File: -aafMAC_RUNRS_ACCTFILE.ids. This file exists in the specified user directory (defined on the User Files tab of the Default Options dialog)
-b	<i>filename</i> is the name of the Interval Database that contains the interval data for the calculations. The default is selected via the Interval Data Source tab on the General Options dialog.
	A file name that is simply RDB specifies the interval data table selected on the Interval Data Sources tab on the Default Options Data Manager dialog (see Interval Data Source on page 2-12 in the <i>Data Manager</i> <i>User's Guide</i>).
-W	<i>filename</i> is the name that the program assigns to the output reports. If you do not supply this option, the program displays the output on screen and does not produce a file.
-i#	Set interval data handling. Same values as INTD_ERROR_STOP (0,1,2,3). Default # is 1 (error stop). If not set, the On Rules Language Interval Data Error option specified on the Error Handling tab of the General Options dialog is used.
-rp	Turn on all Report Options - Problem Determination.
-rop	<i>eibr</i> Any combination of e i b r. Sets Report Options - Problem Determination. Turn on Error Messages, Input options, Show Bill History, Show Rate Schedule.
-rogs	Display summaries only. Sets Report Options – General Options. Turns on the Display Summaries Only option

Parameter	Description
-V	 OPCO:JUR:RS[:VER][:RC] is the identifier for the rate form. It is required (except when you supply an account ID/list using the -a switch, and corresponding records exist in the Rate Code History table). OPCO, JUR, RS are the operating company code, jurisdiction code, and rate form code (respectively) that identify the rate form. You can specify a NULL operating company or jurisdiction by leaving a blank space where OPCO or JUR would be. The version number is optional. If you do not supply a version number, the program automatically uses the rate form that was applicable on the stop date of the analysis period (specified using the -t switch). If you supply a version number, the program uses the trial version indicated (you would typically do this for testing). RC is the Rate Code if one is used. This is optional. See the <i>Data Manager User's Guide for</i> additional information about this convention for identifying rate forms.
-S	From test period Bill month. MM/YYYY format
-t	To test period Bill month. MM/YYYY format
-1	Demand blocking name and hours use blocking name. This parameter needs to be specified twice. First one will be demand blocking.

Hours Use Matrix

Index

Α

Account Centric View 1-7 account data browsing 1-15 viewing 1-15 Add Fall Daylight Savings Time Value to Energy requests 1-12 Adding Report Titles 1-16 Adjusted Rate 5-3 Adjusted Revenue 5-3 Adjusted Units 5-3 Advanced Compute Revenue for Customer(s) dialog 3-4 Advanced Create Bill Frequency Table dialog box 2-4 Advanced Customer Impact Inputs dialog box 6-4 Advanced Typical Bill dialog box 7-3 Alpha Codes 1-11 Analyses Bill Frequency 2-6 Crossing Point 8-2 Revenue Adequacy 9-2 1-6 ASCII 2-2

В

Background Color 2-7 Bill Calculation Results Columns Options 1-18 Bill Calculation Results Columns tab on Report Options window 1-18 Bill Frequency batch mode B-10 Bill Frequency Analysis 2-2, 5-3 Bill Frequency Analysis Inputs dialog box 2-6 Bill Frequency Revenue Analysis 5-2 Bill Frequency Table 2-2, 2-4, 2-6 Creating revenue analysis from 2-9 Graphing 2-6 Rate Code Groups 2-2 Bill Frequency Tables 2-2 Analyzing 2-6 BILLFREQUENCY command syntax B-10 BILLFREQUENCY.EXE B-10 Billing 1-10 Billing determinant 2-2 Blocking 2-3 blocking creating 2-3

opening existing block 2-3 Blockings 2-2 Definition of 2-2 Using in Bill Frequency Tables 2-2 Blocks 2-2

С

Check Interval Data Validation before Merge 1-13 Compound report values 1-18 Compute Revenue for Account(s) dialog box 3-3 Compute Revenue for Bill Frequency Table dialog 2-9 Contents tab online help 1-21 Context-sensitive help 1-21 opening 1-21 Continue 1-13 Create Bill Frequency Table dialog box 2-4 Crossing Point batch mode B-16 Crossing Point Analysis 8-2 Crossing Point Analysis dialog box 8-3 CROSSINGPOINT command syntax B-16 **CROSSINGPOINT.EXE B-16** Currency displayed to n decimal places 1-10 Currency Presentation 1-26 CUSTIMPACT command syntax B-2 CUSTIMPACT.EXE B-2 Customer Impact batch mode B-2 Customer Impact Analysis 6-2, 6-3 Customer Impact dialog box 6-3 Customer Revenue batch mode B-7 Customer Revenue Analysis 5-3 Customer Revenue analysis Saving for Revenue Adequacy or Simulation 3-4 Customer/Account Detail 1-17 Customize 1-6 CUSTREVENUE command syntax B-7 CUSTREVENUE.EXE B-7

D

Date Presentation 1-26 Day start 1-12 Default Jurisdiction 1-9 Default Operating Company 1-9 Default Options 1-8 Default Rate Schedule 1-10 Default Season Schedule 1-10 Default to landscape printing after this # of characters 1-9 Delete 1-5 Display calculation time with date on each report page 1-9 Display error messages 1-13 Display Midnight 1-10 Display Report 1-16 Display summaries only 2-6 Display ToolBar 1-6

Е

Error Handling 1-13 Exclude intervals with quality less than 1-11 Export 1-5 Revenue Adequacy 9-3 Revenue Simulation 5-4 Export Validation Flag option 1-12 Export/Delete 1-5

F

File menu commands 1-3

G

General tab on Report Options window 1-16 Graphical User Interface 1-9 Graphing Bill Frequency analysis 2-6 Crossing Point analysis 8-4 Customer Impact analysis 6-5 Typical Bill analysis 7-4

Η

Help context-sensitive 1-21 Help icon 1-21 Help icons 1-21 Hours Use Matrix batch mode B-19 Hours Use Matrix Report 11-2 Running 11-3 HOURSUSEMATRIX command syntax B-19 HOURSUSEMATRIX.EXE B-19 How to Adjust the amounts 5-3 apply the settings 1-23 copy text from one data entry field and paste it into another 1-22 Create a graph 2-6 Create a New Analysis 9-3 Create a report 2-6 Delete an existing analysis 9-5 delete the settings from the database 1-23 Export the file 5-4 map a Rate Code A-3 Open a Revenue Analysis File 5-3 Open an existing analysis 9-3 Run a Crossing-Point Analysis 8-3 Run a Customer Impact Analysis 6-3

Run a Customer Revenue Analysis 3-3 Run a Hours Use Matrix Report 11-3 Run a Single Step Analysis 4-3 Run a Typical Bill Analysis 7-3 save settings 1-23 Save your changes 5-4 set your options 1-8 use the account shortcut 1-22 Use the Revenue Adequacy window 9-3 How to open context-sensitive help 1-21 How to open online help 1-21 How to set and save report options 1-16

I

Icons Help 1-21 Index tab online help 1-21 Input values 1-17 **INTDTOUVALUE 1-12 INTDVALUE 1-12** Internal ID 1-23 International Database Support 1-29 File Formats 1-29 International Support 1-25 Interschedule Mapping Table A-3 Inter-Schedule Mappings Table A-3 Interval Data Merge 1-13 Interval Data Merge Selection Criteria 1-13 Interval Data Options 1-11 Interval Data Source 1-11 Interval time 1-12 Issue Information Message 1-13 Issue Warning Message 1-13

J

Jog 4-4

L

LABEL \$EFFECTIVE_REVENUE "Total Charges" 1-18 LABELed Identifier Values 1-17, 1-18 Languages 1-25 LOAD FACTOR 1-17 Locales 1-25 Log Message 1-13 Logon ID 1-23 LSCurrency table 1-26

М

Mapped Rate Code A-3 MAXDATE 1-12 Maximum number of Undo's allowed 1-10 Menus Analysis 1-4 File 1-3 Help 1-6 Tools 1-6 Window 1-6 Minimum Printed Line Width 1-9 Multiple Currency Support 1-25, 1-28 Oracle Utilities Receivables Component 1-28 Oracle Utilities Receivables Component Reports 1-28 Other Oracle Utilities Products 1-28

Ν

Navigation shortcuts 1-22 New Revenue Adequacy dialog box 9-3 Numeric Presentation 1-26

0

On Rules language Interval Data Error 1-13 Online help icons 1-21 opening 1-21 Tabs Contents 1-21 Index 1-21 Search 1-21 Opening context-sensitive help 1-21 Opening online help 1-21 option 1-6 Options 1-6 Date Format 1-9 **Options Feature 1-8** Oracle Utilities Rate Management Menus 1-3 Other Report Options 1-16

Ρ

Print Detail 1-17 Print detail all 1-17 default 1-17 none 1-17 normal 1-17 Print Detail option 1-17, 1-18 Definition of 1-17 Print Detail Options 1-17 overriding 1-17 Print Detail Options on Report Options window 1-17 Print Detail Options setting 1-17 Print Detail tab on Report Options window 1-17 Problem Determination Options 1-18 Problem determination options 1-16 Problem Determination tab on Report Options window 1-18

R

Rate Analysis 1-10 Rate Code A-3 Rate Code Groups 2-2 Rate Codes 2-4 Report components 1-17 descriptions 1-17 Report Options 2-6 Report options 1-16 saving 1-16 setting 1-16 Report Setting records 1-23 Report Settings 1-23 Report Titles adding 1-16 Reports saving 1-16 Revenue Adequacy 9-2 Revenue Adequacy dialog box 9-3 Revenue Adequacy window 9-3 Revenue Simulation 5-2, 5-4 Adjusting values in 5-3 Revenue Simulation dialog box 5-3 Round Revenue 1-10 Rules Language Label and Report statements 1-17 Run to Selection 4-4

S

Saving Reports to Files 1-16 Search tab online help 1-21 SEASON_SCHEDULE_NAME identifier 1-10 Select By 11-3 Select Rate Code list A-3 SELECT RATE CODE statements A-2 Set Determinant Code dialog box 8-3 Setting and saving report options 1-16 Shortcut "jumping" from an open report to another module 1-22 Show Bill records to Save (BillHistory, CSS, etc) 1-18 Simple report values 1-18 Single Step Analysis 4-2 Single Step Customer Revenue dialog box 4-3 Specify the level of detail in a bill report 1-17 Specifying the level of detail in a CIS transaction record 1-17 Stop analysis after ## errors 1-13 Stop with Error 1-13

Т

Target Revenue 5-3 Test Period 1-10, 2-6 Text copying from one data entry field into another 1-22 Typical Bill batch mode B-13 Typical Bill Analysis 7-2, 7-3 Typical Bill Analysis dialog box 7-3 TYPICALBILL command syntax B-13 TYPICALBILL.EXE B-13

U

User Files 1-14 UserID 1-2

W

Write to File 1-16