Oracle Utilities Load Analysis is a solution designed to help collect, manage and analyze interval data supporting load research directives. It consists of subsystems for Sampling, Load Data Management, Load Data Analysis, and Cost of Service.

Comprehensive Energy Analysis
Oracle Utilities Load Analysis unlocks information buried within your enterprise data. It systematically collects and validates data from many sources, including current and historic usage, billing and weather. Oracle Utilities Load Analysis also provides advanced editing, estimating and processing of large volumes of information.

The value of Oracle Utilities Load Analysis comes from the sophisticated analytic engine partnered with powerful interval data management. Users can quickly develop statistically valid sample designs, understand customer load and energy usage patterns, supporting load profiling and estimation, or other purposes. Oracle Utilities Load Analysis also provides efficient interval data manipulation functions and operations supporting comprehensive data analysis and the calculation of complex statistics.

Utility Business Intelligence
How are the most successful distribution companies able to maximize their profits and still maintain high service levels? How can these companies comfortably predict demand in enormously complex environments? How can they establish equitable prices across their customer base?

Distribution companies around the globe use Oracle Utilities Load Analysis to obtain this critical knowledge from data across their organization. Oracle Utilities Load Analysis is the most extensive, powerful and widely used load research system available today, providing the tools to collect, manage, analyze and effectively store large volumes of energy data.

Advanced Data Management and Analysis
Validation, Editing and Estimating. Oracle Utilities Load Analysis provides automated and comprehensive validation along with editing tools that check and clean newly entered or newly edited data for anomalies and enable personnel to change any descriptive information or interval data value. An audit trail of edits is maintained and the original, unaltered record is stored for restoration at any time.

Ratio Analysis. Oracle Utilities Load Analysis expands sample demands to class estimates using actual or calculated billed energy. Users produce demand estimates
using combined and separate analysis, including a measure of their performance. No additional data collection or increase in sample size is needed.

**Program Scheduler and Sequencer.** Oracle Utilities Load Analysis allows users to link together a series of Oracle Utilities Load Analysis, user-written, and/or third party programs (such as batch, C++, Visual Basic and Java) in a customized sequence designed for production processing. Users schedule programs to run at specified times of the day and specify business flow for automated processing.

**Database Management.** A complete tool set is available to view, add, update, delete and graph load data. Oracle Utilities Load Analysis provides utilities with the ability to create and manage databases, enter data and archive data for long-term storage. Oracle Utilities Load Analysis is also equipped with sophisticated database management tools to handle large volumes of interval data very efficiently.

**Import/Export Data.** Users enter interval data into an interval database using one of the supported input formats or write their own import routines using its powerful Application Program Interface (API). Oracle Utilities Load Analysis interfaces with third party applications such as MV90®, Cellnet®, Westinghouse® and Teldata® to facilitate business with other energy information suppliers. A .NET-based interface is available to support custom written applications to access and manipulate your interval data.

**Sampling**

The Oracle Utilities Load Analysis sampling system provides users the ability to design and maintain statistically valid samples for estimated energy and demand statistics. Users graphically design, select and validate single dimensional stratified or non-stratified and multidimensional samples for user-defined target populations. Samples are manipulated using any customer data file or prior survey as input. This easy-to-use system employs sophisticated sampling methodology that produces highly reliable and accurate samples for any type of customer research.

**Report Generation**

**Totalizer.** Generate totals and subtotals of load values for customers with multiple points of delivery. Users produce summary load statistics showing peaks, averages, load factors and a measure of missing data, all useful for power and wholesale billing, and for load studies.

**Late Cuts.** The quality of data inputs to load research databases are monitored for late cuts. Users identify missing cuts of data while recovery is still possible. This report is applied to an entire database or to information on specified customers. Late cuts are automatically identified by channels whose data ends before a specified cutoff.

**Validation Statistics.** Monitor the quality of data as it is entered into the load research database. Oracle Utilities Load Analysis summarizes the results of validation tests into easy-to-read reports, enabling users to recognize trends in the quality of load data.
Analysis

Domains Analysis (Mean-Per-Unit and Ratio). Accurately estimate demand for sub-populations of customers. Users produce many types of load statistics such as coincident and non-coincident demand and energy. Domains Analysis uses existing field samples not originally considered in the sample design yielding more value for your existing data.

Coincident Peak Analysis. Produce estimates of a rate class coincident peak demand and its corresponding sampling error for up to twelve periods. This helps users determine the responsibility of a rate class towards costs, providing a more accurate measure than approaches based on a single hour of demand. Oracle Utilities Load Analysis utilizes mean-per-unit and ratio estimation techniques.

Proxy Day Selection. Automatically select best matching historical load shape in comparison to a specified selected day.

Cost of Service Interface with Probability of Dispatch. Incorporate all major cost allocation methods, providing an essential link between load research data and cost of service software. This enables quick comparison of different cost allocations methods and their revenue impacts. Users may calculate time-differentiated demand and energy cost allocation factors over all hours of the year. Oracle Utilities Load Analysis provides tools to balance premise level loads to system loads. This process incorporates variable, fixed losses, and unaccounted for energy, including energy allocation modeling, premise level development, generator level development, cost allocation and probability of dispatch.

Individual Customer Analysis. Produce time-of-use, entire period and average day statistics and reports. Users may apply different time-of-use schedules to the same customer in a single run. Oracle Utilities Load Analysis produces statistics for interruption and load control periods, and compute statistics for non-contiguous periods in the same analysis.

Energy Software Solutions
Oracle Utilities Load Analysis consists of two main functions:

**Load Data Management.** Accepts load data from a variety of sources, ensures the data is complete, consistent, and accurate. It also makes the data available for reporting and analysis.

**Load Analysis.** Applies statistical algorithms to the load data to generate meaningful knowledge on customer load and energy usage patterns, and generates standard and customized reports. All statistics are stored in the database for future reference and reports.

**KEY BENEFITS**
- Production-grade, mature, proven software
- Produce statistically valid samples
- Complete Interval Data Management System
- Collect, Validate, Edit and Estimate sample data
- Powerful transformation system allowing complex, custom analysis and data generation
- Robust and customizable reporting tools allow both formatted and graphical displays of interval data
- Expand sample demands to class level estimates
- Leverage sampled data using domains analysis
- Determine class coincident peak statistics
- Produce cost-allocation factors for sampled and unmetered rate classes

Copyright 2009 Oracle. All Rights Reserved.

This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor is it subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.