



Solution Integration Oracle/Lodestar Transmission Billing System

■ ■ ■ ■ INTRODUCTION

Duke Energy decided to move ahead with an integrated packaged Software Solution (Oracle's Lodestar Billing Expert Module) to support its billing operations group with its monthly accounting, invoicing and reporting activities. The project also was targeted to significantly lower the operating and maintenance costs for multiple legacy systems. These existing systems were based on older custom-coded applications that had been linked together over the years through connected data bases. The Duke Business and Information Technology (IT) leadership group was certain they could move to a more effective solution that would improve billing accuracy, reduce costs and establish a robust billing platform that could be simply expanded in the future to accommodate more customers with a unified data structure.

■ ■ ■ ■ CHALLENGE

There were a number of key factors that made this SW implementation a challenging effort for all involved in the project.

- Complex billing rules dictated by the Federal Energy Regulatory Commission (FERC), which consisted of more than 250 unique calculation sets to compute costs, credits, penalties and special conditions.
- Non-standard energy delivery and transmission contracts
- Multiple data sources with different data format structures / standards
- Advanced Lodestar rules language requirements to support hourly meter interval data and exception rules

The sponsors have regained confidence that IT can deliver and are enthusiastic that their implementation objectives are understood and will be achieved – the detailed plans and executive briefing were superb.

Solution Integration: Oracle/Lodestar Transmission Billing System



■ ■ ■ ■ THE SOLUTION

The NouvEON team partnered with the Duke Energy IT and business teams to assemble a strong project team (30+ team members) to address the many project activities and deliverables. There were extensive requirements from gathering the detailed solution requirements and then code and test the complex Lodestar rules language engine. The complete solution also included the definition of a new customer data standard and integration approach which leveraged the Informatica integration toolset to pull together all the required data elements to properly generate the monthly customer invoices and extensive reporting sets.

The team also had to satisfy the many FERC and Sarbanes-Oxley (SOX) reporting and validation requirements that are necessary for this regulated financial system. Robust code testing and fix procedures were required to address the hundreds of test scripts that were executed to validate this large solution. The HP Mercury Quality Center toolset was used to support this effort; the teams worked diligently for eight weeks to test every solution component starting with the eight source data bases, the data warehouse, the more than 30+ interfaces, the Lodestar Adapter, the transmission billing application, and the Crystal Reporting Toolset. This integrated business solution was able to pass the business team's User Acceptance Test (UAT) and receive Production Acceptance on schedule and within budget.

■ ■ ■ ■ THE RESULTS

The Duke Energy Financial team has estimated that the delivered solution will decrease manual accounting and invoicing procedures by 15-20 work-days per month. The IT support team will now be able to consolidate and reduce two full time support positions due to the automated, integrated solution and apply these resources to other areas of the organization that need this support.

The Duke Energy leadership team noted that the targeted benefits (both business and IT) have been achieved with the implementation of this system. Both IT and business team labor costs and systems were reduced as planned while accuracy of the customer invoice and report has been significantly increased, leading to further customer satisfaction improvements. This solution also supports Web Portal enabled access to invoices and energy usage reports for the Duke Energy customers in a secure environment.

The Duke purchasing group had also noted that the NouvEON project team delivered this solution at a significantly lower cost than the big five competitor firms (based on RFP inputs) and achieved this savings in a challenging fixed bid situation. The project savings (estimated at more than \$1 million) has enabled the Duke Energy team to invest in more system improvements in this key financial management area.

■ ■ ■ ■ CLIENT PROFILE

Duke Energy is one of the largest electric power companies in the United States. Duke Energy supplies and delivers energy to approximately 4 million U.S. customers. Duke Energy has approximately 35,000 megawatts of electric generating capacity in the Midwest and the Carolinas, and natural gas distribution services in Ohio and Kentucky. In addition, Duke Energy has more than 4,000 megawatts of electric generation in Latin America.

NouvEON Services provided:

- Project Management
- Software Application Development
- Solution Integration
- Program Management and Oversight
- Quality Assurance Services

NouvEON Technologies Used:

- Oracle/Lodestar Billing Expert Application