



Case Study



Client Profile

Panda Energy International, Inc. (“Panda” or the “Company”) is a privately held, non-regulated electric generation company whose primary focus is the development, ownership and operation of state-of-the-art, environmentally clean, low-cost power plants. Headquartered in Dallas, Texas, Panda owns multiple generating facilities in North America, Nepal and China. Since 1982, Panda has grown into a significant player in the merchant power plant industry. In addition, since the deregulation activities taking place in Texas, as well as deregulation in other states in the country, the complexities and dynamics of the energy markets have impacted Panda’s operations.

Executive Summary

Panda has recognized that information technology will continue to play a key role in its ability to respond to these changes and support continued optimization of the underlying business processes. With this recognition, Panda hired DYONYX to conduct an independent assessment of current business processes and information technology infrastructures and the viability of the existing application systems to support the near-term growth projections.

Solution

The scope of the project was to assess existing core business processes, the policies and procedures that support those processes and the capability of the existing information technology and business system infrastructures that support Panda’s key business functions. In addition, the near-term viability of the infrastructures was evaluated in light of the Company’s overall strategic directions and projected growth.

The divisions within Panda that were included in the scope of the assessment were as follows: Engineering, Information Systems, Procurement, Legal, Real Estate, Accounting, Project Management, Work Planning and Control, Operations, Materials Management, Plant Optimization, Energy Management, Fuel Management, Sales and Marketing, Human Resources, and Communications.

DYONYX conducted an assessment of the existing information technology infrastructures and the viability of the existing application systems to support the near-term growth projections. The team also evaluated the core processes, procedures, and operations of the departments referenced above. As part of this effort, DYONYX created written documents describing current processes and recommended improvements. We documented and currently maintain Standard Operating Procedures for the IT division. Specific recommendations were provided for improvement of policies and procedures, information assurance, employee roles and responsibilities, project management and planning, application support processes, software engineering practices, and quality assurance functions.

Using a structured business information modeling technique, we identified gaps relative to core business function processes, specific tasks required to support those processes and the required roles and responsibilities relative to the tasks. This analysis was further integrated into the current application systems architecture relative to business process requirements. Recommendations for readjusting resource allocation,



policy and procedure inefficiencies, application system functionality, and integration strategies were also developed.

From a data warehouse and document management perspective, DYONYX also developed a high-level strategy for integrating hard copy data and information available from Web-based information databases related to energy trading including weather, daily energy prices, trading and pricing information, and operations data. We identified data integrity issues and developed strategies for consolidation of information and databases and resolution of the problems and deficiencies. We evaluated the adequacies of the database applications infrastructures including interoperability, and performance. We were then tasked to design a multi-tier application that had to be integrated with 11 other disparate generation systems that required seamless integration into one large data warehouse for supply chain information on rate usage.

Significant Project Achievements

DYONYX completed this firm fixed priced project within budget and timeframe required. Panda was so satisfied with the recommendations and all deliverables that they awarded DYONYX a 1-year outsource support contract.



DYONYX LP, is a privately held information technology and management consulting firm dedicated to helping clients across the nation improve their productivity and security and reduce their cost and risk through a proven set of methodologies, extensive experience, deep skills and world class service at reasonable rates. For more information contact: Timothy Barto at: 713.830.5910 or tim.barto@dyonyx.com or visit us on the web at www.dyonyx.com