



Centrica Energy
 Windsor, England
www.centrica.com

Industry:

Utilities

Annual Revenue:

US\$35.8 billion

Employees:

32,800

Oracle Products & Services:

Primavera Risk Analysis

“Oracle’s Primavera Risk Analysis has given us a massive, immediate, and sustainable return on our investment.” – Jim Barrett, Engineering Manager, Centrica Energy

Centrica Energy Increases Profit by US\$1.6 Million and Gains Instant Return on Investment

Centrica Energy owns seven gas-fired power stations that provide a total generating capacity of 3,420 megawatts (MW). Part of the leading integrated energy company Centrica PLC, Centrica Energy has 12 million business and residential customers and provides more than 50% of the United Kingdom’s peak domestic demand.

Challenges

- Improve the accuracy of risk assessments undertaken prior to power plant shutdowns for routine inspection and maintenance
- Predict cost and duration of outages and optimize scheduling to mitigate risk of overruns at average daily cost of US\$245,000
- Identify, quantify, and manage both probabilistic and unknown areas of risk and uncertainty throughout entire project lifecycle
- Calculate additional energy to meet customer demand during an outage and to source at the most advantageous prices

Solution

- Implemented Oracle’s Primavera Risk Analysis to leverage risk
- Adjusted scheduling to mitigate cost and duration of US\$49 million overhaul of the 1,260 MW South Humber Bank plant
- Replaced inaccurate, time-consuming, spreadsheet-based risk control, scoring, and schedule management with Primavera’s multidimensional algorithms and contingency response tools
- Benefited from Primavera’s intuitive tools to predict likelihood and impact of primary and specific risks, such as the actual physical condition of plant and machinery
- Leveraged Primavera’s advanced computational modeling to assess the impact of secondary and generic elements, such as industrial action or bad weather on duration and cost of outage
- Reduced exposure to volatile energy prices by determining outage shortfall accurately, enabling best prices to be sourced
- Created a full-risk matrix and build a risk-adjusted schedule incorporating mitigation plans during outage and subsequent return to commercial service
- Completed overhaul and return to service for South Humber Bank in 70 days, five days ahead of schedule, increasing profit by US\$1.6 million more than the initial plan
- Achieved a 1:1000 return on investment