Splunk® at LUMO Energy

Real-time intelligence helps optimize revenue and operations



"With the assistance of Splunk's reporting system, we have been able to gather greater details on the efficiency and health of each power station."

> Manager, Operations LUMO Energy

OVERVIEW

INDUSTRY

Infrastructure Management (Utilities / Energy)

SPLUNK USE CASES

- · Monitoring and alerting
- Data visualization
- · Application management
- · Capacity planning
- · Real-time event correlation
- · Troubleshooting

BUSINESS IMPACT

- Optimized revenue
- Real-time reporting and dashboards
- Capacity planning
- Resource optimization

DATA SOURCES

- · Live data feed from AEMO
- Telemetry logs
- SCADA system events
- Modbus data engine events
- · Infrastructure management systems

WHY SPLUNK

- · Agile Reporting, Analytics & Visualization
- · Fast Time to Value
- Open, Extensible Platform
- · Powerful Search / Reporting Language

The Business

LUMO Energy is an Australian energy retailing business with several power stations situated throughout Australia. LUMO Energy has considerable operational experience in the peak generation sector of the National Electricity Market.

Challenges

LUMO Energy uses a customized supervisory control and data acquisition (SCADA) system in order to monitor and control its machinery and equipment. LUMO Energy wanted to extend the capacity of its SCADA system in order to enhance the company's ability to react to price fluctuations in real time and to maximize revenue. In addition, with the goal of increasing cost savings and operational efficiency, LUMO Energy was looking for a solution that would give real-time visibility into the infrastructure of its many power stations.

Enter Splunk

The energy provider turned to Splunk to automate its monitoring of base electricity prices and predictions. Custom-built Splunk data collection software for HTTP & FTP now rapid-polls the Australian Energy Market Operator (AEMO) for energy pricing and demand data. Splunk software indexes inbound data from AEMO, runs LUMO Energy specific analysis and calculations, then securely provides private execution proposals to stations via on-site Splunk instances that interact directly with programmable logic controllers (PLC) running hardware and equipment on site at LUMO Energy's power stations.

The Splunk integration has given LUMO Energy greater control over the management of its custom SCADA environment. As part of the deployment, LUMO Energy has built a variety of dashboards in Splunk that display market demand and pricing information, power station status and output, resource utilization and other telemetry, increasing operational visibility across the company's energy generation assets. The energy provider has thus gained faster responsiveness to market fluctuations, unparalleled visibility into plant & equipment efficiency and fail-safe security for private online control of its energy assets operating in the Australian market.