



## CALPINE CORPORATION, USA

### Key Facts

**Company:** Calpine Corporation

**Website:** [www.calpine.com](http://www.calpine.com)

**Industry:** Power Generation

**Products Used:**

j5 Operations Management Software

### THE PROBLEM

Calpine Corporation is America's largest generator of electricity from natural gas and geothermal resources.

Their fleet of 83 power plants in operation or under construction represents nearly 27,000 megawatts of generation capacity.

Serving customers in 18 states and Canada, they specialize in developing, constructing, owning and operating natural gas-fired and renewable geothermal power plants that use advanced technologies to generate power in a low-carbon and environmentally responsible manner.

Calpine's project objective was to implement a web-based electronic logbook application for recording plant status, shift activities, open issues to facilitate the shift handover.

The system and data needed to be readily accessible to all Calpine plants in a format common to all users. It needed to be accessible from their widely distributed facilities and at the same time visible from a corporate level.

The challenge was to find one single system that could serve a high user load from facilities in different regions and with different fuel-types.

j5 Operations Management Software meets these needs and is replacing all current methods of recording such information at Calpine. The j5 Operations Logbook, j5 Shift Handover and j5 Standing Orders applications are now all in operation.



## HOW j5 OPERATIONS MANAGEMENT SOFTWARE PROVIDED THE SOLUTION

j5 has provided a central installation that is flexible enough to accommodate Calpine's diverse facilities. Operators see only the data from their facility, but the data is visible at a corporate level for trending and analysis. This provides Calpine Corporation an overview of their corporate data set and allows analysis particularly in regard to their corporate NERC compliance.

Calpine has also been provided with custom configuration including the ability for each site to add its own predefined message templates.

## BENEFITS OF j5 OPERATIONS MANAGEMENT SOFTWARE

The project has resulted in the establishment of a common methodology for recording plant activities, issues and status in a single data repository and this has unlocked many benefits:

- Management reporting has been streamlined
- There is an improved flow of information to users
- The transfer of information at Shift Handover is clear and automated
- Awareness of power reliability problems that need to be addressed has increased
- Transfers of personnel between plants have been aided
- A controlled, secure environment to manage operations management procedures has been established across the Calpine fleet, eliminating disparate logbook solutions
- Compliance with logbook policies and procedures on a common software platform has reduced corporate risk



## CUSTOMER TESTIMONIAL

"It has become an essential tool. Logbook entries from twelve remote sites can now be easily reviewed first thing each morning via the Emailed Daily Log Report. Old school operators were initially sceptical but quickly learned how to use the program."

"The program is used by 100% of the employees, many of which had no computer skills prior to Calpine. Previous paper logbook entries were lacking and management oversight of the log entries was used mainly when there was an incident. The program is used to support plant administrative activities such as GADs, corporate event reports and used to monitor daily work activities."

"One of the other major benefits of the program is the Operational Order Feature. Managers now have the ability to issue night orders, standing orders and new procedures and then have the ability to see that their direct report received and acknowledged. It makes the employees more accountable for their actions and is just a good way to communicate."

— Calpine Plant Manager

## ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build, and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.