OCTAVE

AGL Energy uses Octave Tempo Operations Management to evaluate shift production levels

AGL Energy is one of Australia's leading integrated energy companies and the largest ASX listed owner operator and developer of renewable energy generation in the country

Key facts:

Company: AGL Energy

Website:
www.agl.com.au

Industry: Mining

Country: Australia

Octave products used:
Tempo Operations
Management (*j5 Operations
Management Solutions*)

Its diverse power generation portfolio includes base, peaking and intermediate generation plants spread across traditional thermal generation as well as renewable sources including hydro, wind, landfill gas, solar and biomass.

The Loy Yang open cut brown coal mine in Victoria's Latrobe Valley, near Traralgon, is owned and operated by AGL Energy.

The problem

The Loy Yang open cut brown coal mining operation uses four electric-powered bucket wheel dredgers, 190 meters long and 50 meters high. Each one weighing around 5,000 tons and is able to excavate 4,000 tons of coal an hour or over one ton of coal a second.

The coal is taken from the mine to the power station by 15 kilometers of conveyors that carry the coal at speeds of 5.3 meters a second to an 80,000-ton capacity bunker. The coal is crushed by rotary crushers that can handle 2,500 tons an hour each before it is delivered to the power station.

During each shift, the daily directions and targets need to be conveyed to the operations staff indicating the requirements in terms of quantity and quality of the coal required. Information detailing the status and availability of the major equipment is also needed.

Key benefits:

- Tempo Operations Management is saving time by producing concise requirements and directions at the start of each shift

- Tempo Operations Management is making information available to the entire operations crew allowing for greater communication and direction within the group

- Tempo Operations Management is utilizing and exposing the planning data within the the Aveva™ PI System™ directly to a larger audience which improves the operations workflow

- The provision of this data at the start and end of each shift enables a group approach to shift handover and daily production meetings

At the end of each shift, reports are required to indicate if objectives were met, comparing planned tonnage to actual tonnage. AGL Energy's objectives were to streamline the provision of daily requirements and combine that data with actual achievements to evaluate the shifts in production levels.

How Tempo Operations Management solved the problem

AGL Energy uses Tempo Operations Logbook (formerly j5 Operations Logbook), Tempo Shift Handover (formerly j5 Shift Handover), Tempo Work Instructions (formerly j5 Work Instructions) and event management capabilities throughout its operations along with using templates and reporting functionalities to meet its extensive requirements.

Tempo Operations Management works with the Aveva™ PI System™ and current and future planning data is provided to Tempo Operations Management to build the requirement details and the resulting shift production levels.

This combined data provides four reports for each shift:

- **Shift production requirements** provide the tonnage required and the rate per hour, major events on the dredgers, digging priority instructions, quality of the coal and the bunkering strategy.

- **Coal draw directive** provides instructions to the dredger operators on the drawing positions for the shift; this data is also expanded on in the Tempo Operations Logbook.

- **Shift leaders report**, generated at the end of each shift, compares planned and actual results, includes bunker levels, stocks at the start and end of shift, output and digging rates of individual dredgers and major events from the Aveva™ PI System™ event frames.

- **Shift handover report**, generated at the end of the shift, is a standard Tempo Shift Handover report containing additional information from the including hazards, safety and planning issues.

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About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property, and assets– for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency, and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.