



# TODD ENERGY

## MET2 PLANT – FIRST SHUTDOWN

### McKEE PLANT, TARANAKI, NEW ZEALAND



### The Opportunity

Todd Energy engaged Fitzroy Engineering's Construction Group to plan, manage and assist with the execution of the first shutdown for their year-old Mangahewa Expansion Train 2 [MET2] plant at their production facility at McKee.

Todd Energy selected Fitzroy Engineering based on the opportunity to use the Dialog Intelligent Planning System (DIPS), and their commitment to develop an automated time recording system that would deliver the ability to monitor the shutdown status, and provide timely and accurately progress reports.



## The Project

The project was based on an agreed scope of inspection works, some repainting work (due to failed paint systems), some corrective maintenance tasks and a number of Plant Change Requests (PCRs).

Fitzroy were also awarded the contract to execute the erection and dismantling of access scaffolding, and to assist with the mechanical works to facilitate the statutory equipment inspections.

A large number of Emergent Work Requests were raised during the execution phase, and all were minor in nature.

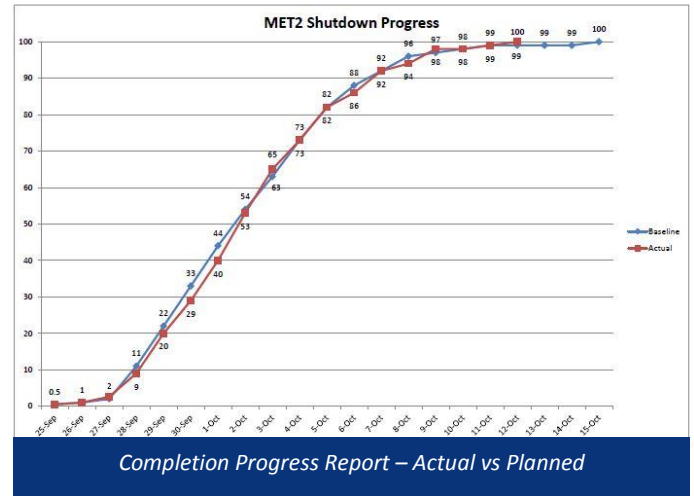


De-Ethaniser Condenser – Heat Exchanger Assembly

## Progress Reporting

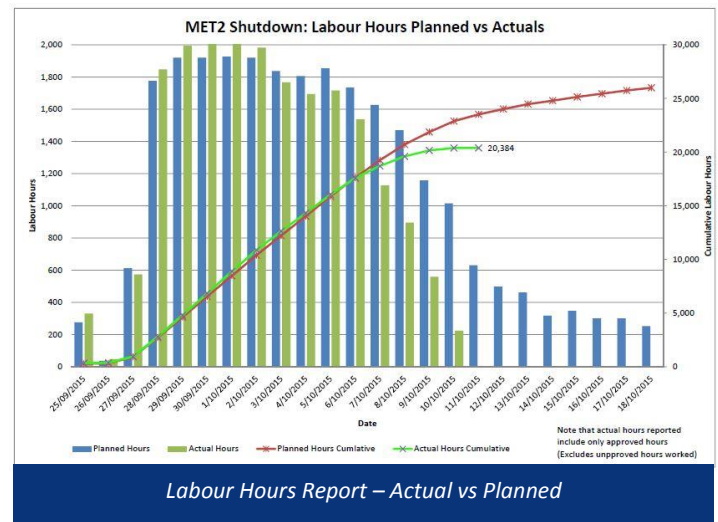
Site labour resources were recorded in TimeClock. Time entry for the main labour groups was automated, using a swipe system and touch screen interface to select shift details and allocated Work Order. These time entries were reviewed by the area supervisors to ensure correct time allocation, and then approved by the client. All other site hours were manually loaded into TimeClock from paper timesheets.

On completion, the actual hours were compared with the baseline planned hours.



Completion Progress Report – Actual vs Planned

The project schedule activities were used to monitor and record progress, and synchronised daily with DIPS and an S-curve progress report was provided against the baseline planned progress. This was available for the overall shutdown; or for the specific plant area; or for a specific equipment item.



Labour Hours Report – Actual vs Planned

## Key Features

- Successful shutdown completed 2 days ahead of schedule
- Fitzroy managed the planning and execution phases
- Site man hours approximately 21,000
- Innovative shutdown progress monitoring and reporting

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