



Case Study

Operational Readiness

Woodside Energy Limited – North Rankin Bravo (NRB)

The NRB platform to be operated by Woodside Energy Limited (WEL) is a five billion dollar project designed to extend the North West Shelf North Rankin field life production into 2040.

The project comprises of a steel piled jacket with 23,000-tonne topsides linked to the existing North Rankin Alpha installation via a 100m bridge.

WEL requested K2 to supply an experienced engineer with offshore operations experience to be embedded in the project operations team in order to assist in the building of the Operational Readiness and Assurance (ORA) plan from FEED through to RFSU.

The ORA plan was developed and defined the following deliverables:

- Operations readiness plan;
- Preliminary budget;
- Cost Time Resource (CTR) sheets;
- Pre-operations budget;
- HSE Process;
- Permit to work systems;
- Simultaneous Operations (SIMOP's) management;
- Organisation strategy roles and responsibilities/job descriptions/competencies and training;
- General production requirements;
- Well surveillance requirements;
- Hydrocarbon accounting requirements;
- Operations philosophy document;
- Asset management philosophy;
- Operations requirements process facilities/utilities and PLQ/control and automation;
- Operability and Maintainability study;
- Commissioning and start up strategy;
- Handover and punch list strategy;
- Definition of steady state operations; and
- Aviation and marine logistics requirements.



A complete operations plan of timeline and resources, including all milestones, was developed and supported by CTRs and cost analysis. The plan was developed to cover all phases through FEED, financial commitment, detail design, construction, commissioning, RFSU, start-up and handover.

Additional support was also provided by K2 for:

- Representing the operations team through design reviews, HAZOP's and a project SIL determination; and
- Project Execution Team (PET) membership for all major packages.