

North Alwyn Secondary Power Generation | 2012

Total Exploration & Production UK

Customer: John Thomson, Operations Support Engineer

Project phase: Define (FEED)

Dundas scope: Petroleum Economics
Development Engineering
Peer Review

Testimonial: *Awaiting External Affairs Approval*

PROJECT DESCRIPTION

The North Alwyn platforms process fluids from 8 fields in the Alwyn area, owned and operated by Total E & P Ltd. The North Alwyn Alpha platform houses a bank of 5 Crepelle diesel generators that provide secondary generation capacity to the North Alwyn Alpha, North Alwyn Bravo and Dunbar platforms. The generators have been in operation since 1985 and have reached the end of their useful life, with temporary generation capacity required for planned shutdowns. A number of FEED-level studies have been completed defining a proposed project to replace the Crepelle generators with modern, efficient units in a piece meal construction campaign that minimised intrusive works and disruption to operations.



DUNDAS ROLE

Dundas provided an independent evaluation of the project, taking a critical view on the suitability of the proposed solution in both technical and economic terms. This was done by first reviewing the documentation issued and seeking dialogue with key Total personnel throughout to ensure clarity on the complex technical issues. Dundas then prepared a high-level production deferral and discounted cashflow model which was used to evaluate a range of scenarios and frame various project options in the context of their likely overall incremental value. Finally, Dundas delivered clear and confident recommendations to the client on the basis of the evaluation work completed.