

PROJECT DATA

Barron Gorge Refurbishment Desktop Study



CLIENT	Stanwell Corporation
PROJECT LOCATION	Queensland, Australia
DATE OF PROJECT	February 2004 - April 2004
SERVICES PROVIDED	<ul style="list-style-type: none">• Desktop Study for Refurbishment Works

The primary purpose of this desktop study was to identify refurbishment and modernisation requirements and upgrade opportunities for the Barron Gorge Power Scheme.

The steps involved in this desktop analysis are listed below:

- Review of existing documentation including: design reports, hydrology reports, testing data, safety assessment reports, historic data and economic parameters;
- Site inspection and discussion with Stanwell Corporation representatives;
- Hydrological review of flow data to assess the optimal sizing, generation capacity and energy production;
- Hydraulic assessment to determine conduit details and headloss estimates;
- Investigation of power scheme upgrade/improvement options and approximate cost estimates;
- Economic analysis and sensitivity analysis.

The main outcome of this desktop study is a range of options for upgrade, refurbishment or retrofit of the headworks, turbines, inlet conduits, governor controls & hydraulics and other mechanical sub-components, in terms of benefits and budgetary costs. The benefits considered include efficiency or capacity improvements, lower maintenance costs over the 40-year life, plant reliability and better response to system requirements.

LEADERS IN CONSULTABILITY



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