

Board Meeting: March 2019	Agenda Number: 12 (vi)	Record Number: ED19/2022
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LORD HOWE ISLAND BOARD

Business Paper

OPEN SESSION

ITEM

Renewable Energy Program Update

RECOMMENDATION

It is recommended that the Board note the renewable energy program update.

BACKGROUND

Funding for the LHI Renewable Energy project is provided through a \$4 million grant from the Federal Government via the Australian Renewable Energy Agency (ARENA), a \$5.9 million loan from NSW Treasury (to be paid back via diesel fuel savings), and \$1.456 million from the Board.

Consultants Jacobs were engaged by the Board in 2014 to lead the technical elements of the project, and community consultation. Jacobs completed a Technical Feasibility Study which showed that using 450 kW of solar panels, a 400kWh battery and two small 275kW wind turbines, would reduce the Island's diesel fuel consumption from 541,000 litres per year to around 180,000 litres per year, a 66% reduction. This combination would also provide 67% of the Island's annual electricity needs. In May 2017, the Federal Minister for the Environment and Energy decided that the "proposed action of constructing and operating two wind turbines on Lord Howe Island would have unacceptable impact on World Heritage values and the National heritage values of the Lord Howe Island Group". This means that it is not possible to proceed with the wind turbine component at this stage.

In June 2017, ARENA representatives indicated that they did not believe that the ARENA Board would support continued funding for the project in its current form. Without the wind turbine component, the project with just solar and battery storage, saving 35% of diesel fuel was not seen as sufficiently innovative and would not serve as a demonstration case for other remote areas. After extensive negotiations, ARENA approved the funding for the development of further options, comprising solar and other renewable approaches, which may be acceptable to their Board and lead to a variation in the Board's funding agreement with ARENA. Jacobs undertook an Other Options Analysis Report on the project economics and potential demonstration value in December 2017. This report was presented to the Board in March 2018, with the Board endorsing Option 4 – Optimised solar and battery configuration with enabling technologies, as the preferred option. Jacobs prepared an addendum to the tender documents to include the changes for the optimised solar and battery configuration ready for the repricing by the two successful tenderers and timelines to award the contract and complete the works, based on the tenderers' response.

The ARENA Board considered the response from Jacobs and the Board based on the tenderers' submissions to the addendum for the Solar, Battery and Control System (SBC) at their Board meeting on 10 August 2018 approved the recommendation to vary the project to solar and battery only subject to conditions and a variation to the current funding deed.

The tender for the solar, battery and control system contract package of work was advertised on NSW e-tendering between 15 June and 24 August 2016. The assessment of the tenders by Jacobs and the Board is complete.

ARENA's Board have approved the project to continue, subject to:

- the winning solar and battery tender achieving a minimum renewable energy factor of 67%
- confirmation of site availability based on the final design
- establishing a Project Control Group
- ensuring LHIB has an appropriately skilled & experienced Project Manager
- the review and acceptance of final costs and timeframes
- the finalisation of funding variation agreement

ARENA also want to ensure the final plant design and roll out provides the simplest system for LHIB to manage and that LHIB are provided with the appropriate training and support by the winning solar and battery tenderer, to allow for the best ongoing maintenance.

The ARENA Board were provided with evidence to show that the project still remained very much feasible and agreed to undertake a renegotiated funding agreement with some additional milestones and conditions including project management.

THE CURRENT SITUATION

At this stage there does not appear to be any technical reason why this project should not proceed. Jacobs have completed the Solar, Battery and Control System final tender assessment report along with the final budgeting. To date the expenditure for the project is \$2,474,503 and requires \$8,636,828 to complete with a \$744,669 contingency amount (including ARENA's \$500,000 contingency).

RECOMMENDATION

It is recommended that the Board note the above information.

Prepared: John Teague, Manager, Infrastructure & Engineering Services

Endorsed: Peter Adams, Chief Executive Officer

Attachments: Nil