

# ADB-46455-001 Electricity Supply Security and Sustainability

This project is still under review by the EWS. Project information and/or project analysis may be incomplete.

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### **Quick Facts**

Countries	Nauru
Financial Institutions	Asian Development Bank (ADB)
Status	Canceled
Bank Risk Rating	U
Voting Date	2013-11-28

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#### **Project Description**

#### **DESCRIPTION**

The impact of the Project will be improved livelihoods of households and businesses served by NUC. The outcome of the Project will be increased reliability and lower cost of electric power service in Nauru. The outputs of the project will be (i) new diesel-fired generation put into service to supply reliable base-load power for NUC, (ii) improvements to existing powerhouse structure, specifically repair/replacement of the existing roof and structural reinforcements (e.g. support columns) as identified.

#### PROJECT RATIONALE AND LINKAGE TO COUNTRY/REGIONAL STRATEGY

- 1. The proposed Electricity Supply Security and Stability grant project will improve the quality and reliability of electricity service of Nauru''s electric utility (Nauru Utilities Corporation, NUC) to its customers. This will be achieved through the delivery and installation of new diesel-fired generation to provide reliable base-load power for NUC, allowing NUC to retire older generation assets and perform scheduled refurbishment of existing units to extend their service lives. The project will also include improvements to the existing structure housing NUC''s generation units (the powerhouse).
- 2. NUC"s power sector operations have been the subject of considerable study and review by external development agencies over the past three years. The poor state of NUC's physical assets, and weaknesses of its management systems, are well documented. Nauru"s current diesel-fired generation fleet remains dilapidated, unreliable, and extremely inefficient. All of NUC"s installed generators are operating at far below their capacity, and are nearing the end of their useful lives. The powerhouse is likewise in poor condition, which represents a vulnerability to Nauru"s supply security. While Nauru is virtually 100% electrified, service reliability is extremely poor. Unscheduled and often prolonged interruptions are frequent. As in other parts of the Pacific where significant intermittent renewable generation sources are being introduced into legacy diesel-based systems, Nauru will remain reliant on diesel generation for its baseload and for system stability and reliability for the foreseeable future.
- 3. The Australian Government has provided millions of dollars of support to NUC over the past decade to cover recurring costs and the procurement of distribution and generation assets. Recently, the Australian Government has shifted its support to build NUC''s capacity by funding the appointment of expatriate management-level personnel to address long-term systemic shortcomings within NUC. The European Union has recently extended a \$1.3 million grant for NUC to fund the procurement and installation of distribution transformers, conductors, poles, and essential maintenance and safety equipment for linemen to bolster network reliability and efficiency.
- 4. Urgent investment requirements have been identified as high priorities to improve service reliability and mitigate the risk of catastrophic failure of NUC''s power generation. Among NUC''s investment priorities are structural improvements to the powerhouse and the introduction of 2.8-3.0 MW (estimated) of new diesel-fired generation to replace existing generation, improve reliability, and reduce fuel costs. NUC estimates that this will result in a 20% improvement in generation efficiency from the current 3.4 kWh to 4.1 kWh generated per liter of diesel consumed. The introduction of reliable and more efficient diesel generation will also allow NUC to schedule retirement or rehabilitation of existing, ageing assets and provide for improved reliability.



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### **Investment Description**

• Asian Development Bank (ADB)

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#### **Contact Information**

#### ACCOUNTABILITY MECHANISM OF ADB

The Accountability Mechanism is an independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by an Asian Development Bank-financed project. If you submit a complaint to the Accountability Mechanism, they may investigate to assess whether the Asian Development Bank is following its own policies and procedures for preventing harm to people or the environment. You can learn more about the Accountability Mechanism and how to file a complaint at: http://www.adb.org/site/accountability-mechanism/main



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#### **Bank Documents**

- Electricity Supply Security and Sustainability [Original Source]
- Project Disclosure PDF [Original Source]



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### **Other Related Projects**

- ADB-46455-002 Electricity Supply Security and Sustainability
- ADB-46455-004 Electricity Supply Security and Sustainability Additional Financing