Report and Recommendation of the President to the Board of Directors

Project Number: 52129-001
June 2018

Proposed Grant
Kingdom of Tonga: Cyclone Gita Recovery Project

Asian Development Bank

CURRENCY EQUIVALENTS
(as of 1 May 2018)

Currency unit	–	New Zealand dollar (NZ$)
NZ$1.00	=	$0.70
$1.00	=	NZ$1.42

ABBREVIATIONS

ADB	–	Asian Development Bank
MFAT	–	Ministry of Foreign Affairs and Trade (New Zealand)
MFNP	–	Ministry of Finance and National Planning
NNUP	–	Nuku'alofa Network Upgrade Project
OIREP	–	Outer Islands Renewable Energy Project
TPL	–	Tonga Power Limited
TVNUP	–	Tonga Village Network Upgrade Project
PAM	–	project administration manual
PDRA	–	post-disaster rapid assessment
PMU	–	project management unit

NOTE

In this report, "$" refers to United States dollars unless otherwise stated.

Vice-President	Stephen Groff, Operations 2
Director General	Ma. Carmela Locsin, Pacific Department (PARD)
Director	Olly Norojono, Transport, Energy and Natural Resources Division, PARD
Team leader	Hanna Uusimaa, Climate Change Specialist, PARD
Team members	Erik Aelbers, Country Specialist, PARD Flordeliza Asistin, Senior Operations and Institutional Coordination Officer, PARD Genna Bantaya, Operations Assistant, PARD Ninebeth Carandang, Safeguards Specialist, PARD Taniela Faletau, Safeguards Specialist, PARD Grace King, Senior Project Officer (Financial Management), PARD Yanying Li, Counsel, Office of the General Counsel Tatafu Moeaki, Senior Country Coordination Officer, PARD Belvina Puamau, Operations Assistant, PARD Ma. Carina Tinio, Associate Economics and Statistics Analyst, PARD
Peer reviewers	Woo Yul Lee, Energy Specialist, PARD Tahmeen Ahmad, Financial Management Specialist, Procurement, Portfolio and Financial Management Department (PPFD) Rosemary Atabug, Associate Social Development Officer (Gender and Development), Sustainable Development and Climate Change Department (SDCC) Oliver Domagas, Senior Financial Control Specialist, Controller's Department Shakil A. Ferdausi, Environment Specialist, SDCC Vergel Medina, Social Development Specialist (Safeguards) SDCC Kevin Moore, Senior Procurement Specialist, PPFD Stephen Peters, Senior Energy Specialist, SDCC David Raitzer, Economist, Economic Research and Regional Cooperation Department Maria Vicedo, Young Professional, SDCC

CONTENTS

PROJECT AT A GLANCE

1. Basic Data — **Project Number:** 52129-001

Project Name	Cyclone Gita Recovery Project	**Department /Division**	PARD/PATE
Country	Tonga	**Executing Agency**	Ministry of Finance and National Planning
Borrower	TON		

2. Sector	**Subsector(s)**	**ADB Financing ($ million)**
✓ **Energy**	Electricity transmission and distribution	6.80
	Total	**6.80**

3. Strategic Agenda	**Subcomponents**	**Climate Change Information**	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Medium
Environmentally sustainable growth (ESG)	Disaster risk management Global and regional transboundary environmental concerns		

4. Drivers of Change	**Components**	**Gender Equity and Mainstreaming**	
Governance and capacity development (GCD)	Organizational development	Some gender elements (SGE)	✓
Knowledge solutions (KNS)	Pilot-testing innovation and learning		

5. Poverty and SDG Targeting		**Location Impact**	
Geographic Targeting	No	Urban	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG7, SDG9, SDG11, SDG13		

6. Risk Categorization: Low

7. Safeguard Categorization **Environment:** B **Involuntary Resettlement:** C **Indigenous Peoples:** C

8. Financing

Modality and Sources	**Amount ($ million)**
ADB	**6.80**
Sovereign Project grant: Asian Development Fund	6.80
Cofinancing	**0.00**
None	0.00
Counterpart	**2.62**
Government	1.14
Others	1.48
Total	**9.42**

Source: Asian Development Bank

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed grant to the Kingdom of Tonga for the Cyclone Gita Recovery Project.

2. The project will support the efforts of the Government of Tonga to reconstruct and climate- and disaster-proof the Nuku'alofa electricity network that was damaged by Tropical Cyclone Gita in February 2018.

II. THE PROJECT

A. Rationale

3. The Kingdom of Tonga consists of 172 islands, 36 of which are inhabited. The total population is about 107,000 people, of which almost two-thirds live on the main island of Tongatapu, home to the country's capital of Nuku'alofa. Based on its exposure, susceptibility, and coping and adaptive capacities, Tonga has been ranked second only to Vanuatu among the countries in the world most at risk of disasters caused by natural hazards.[1] In any given year, it is likely that Tonga is either hit by a major natural disaster or is recovering from a previous one.

4. The country is already experiencing the effects of climate change. Increasing variability in rainfall patterns is causing flooding and droughts in some locations. Increasing ocean temperature has led to coral bleaching and destruction of natural coastal barriers, and sea level rise is contributing to coastal erosion.[2] These changes have heightened Tonga's exposure to disasters brought about by tropical cyclones and storm surges, which have inflicted significant losses on the economy. For example, a cyclone in 2002 resulted in losses of $60 million,[3] and losses from another one in 2010 reached $22 million.[4] Tropical Cyclone Ian in 2014 resulted in total damage and losses of about $50 million.[5] Tonga is also located within the Pacific "ring of fire," which is associated with extreme seismic activity.

5. Tonga is expected to incur, on average, $15.5 million per year in losses from earthquakes and tropical cyclones. In the next 50 years, Tonga has a 50% chance of experiencing a loss exceeding $175 million and casualties higher than 440 people, and a 10% chance of experiencing a loss exceeding $430 million and casualties higher than 1,700 people.[6] These figures could increase if the impacts of climate change are considered.

6. **The emergency.** Tropical Cyclone Gita hit Tonga on 12 and 13 February 2018. It caused widespread destruction on Tongatapu, including Nuku'alofa, and the neighboring island of 'Eua. With average wind speeds of 130 kilometers per hour, and gusts of up to 195 kilometers per hour, it was the strongest cyclone to directly hit Tongatapu and 'Eua since severe Cyclone Isaac in March 1982. An accompanying storm surge reached 1 meter above normal high-tide levels, and 200 millimeters of rain fell within 24 hours, resulting in localized flooding. It is estimated that more than 80,000 people (or about 80% of the population of Tonga) were directly affected. The destructive winds, storm surges, and flooding brought down power lines; damaged and destroyed

---

1 Alliance Development Works. 2017. *World Risk Report 2017*. Berlin.
2 Government of Tonga. 2010. *Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management 2010–2015.* Nuku'alofa.
3 Government of Tonga. 2002. *Natural Disaster Management Report*. Nuku'alofa.
4 Government of Tonga. 2010. *Initial Damage Assessment Report*. Nuku'alofa.
5 Government of Tonga. 2014. *Tropical Cyclone Ian Recovery Plan.* Nuku'alofa.
6 World Bank et al. 2011. *Country Risk Profile: Tonga.* Washington, DC.

schools, resulting in closures; destroyed crops and fruit trees; and damaged public buildings, including the domestic airport, the Parliament building, and Tonga meteorological services. Nearly 5,000 houses were either destroyed or damaged. The government declared a state of emergency for the whole of Tonga on 12 February 2018.

7. **Energy sector damage and needs.** The government led a post-disaster rapid assessment (PDRA) with assistance from development partners, including the Asian Development Bank (ADB).[7] The PDRA estimated the total value of effects caused by the cyclone to be about $164.3 million, equivalent to nearly 38% of the nominal 2017 gross domestic product in Tonga. The estimation of recovery needs incorporated the principle of "building back better." The total recovery and reconstruction cost is estimated at $148.7 million, of which $45.9 million is for the energy sector, including the cost of reconstruction of the power grid infrastructure assets on Tongatapu to a higher standard of disaster resilience.

8. **Grid upgrades improve disaster resilience of electricity network.** The cyclone disrupted the power supply on the islands of 'Eua and Tongatapu, disconnecting all Tonga Power Limited (TPL) customers. However, the service lines that had already been upgraded under the ongoing Outer Islands Renewable Energy Project (OIREP)[8] in 'Eua, and under the Tonga Village Network Upgrade Project (TVNUP) in Tongatapu funded by the New Zealand Ministry of Foreign Affairs and Trade (MFAT), experienced significantly less damage than the grids that had not yet been upgraded. On Tongatapu, TVNUP had already upgraded 54% of TPL's grid prior to the landfall of the cyclone. Of the grids that had not yet been upgraded, 45.9% were damaged, compared with a damage of only 4.7% to the upgraded grids. The experience from OIREP and the TVNUP clearly demonstrates the resilience benefits of updating inefficient and aging power network infrastructure and building back better.

9. Over the first 6 weeks, during which businesses and schools were closed, TPL reconnected the 17,782 customers in Tongatapu through temporary emergency repairs, awaiting the final reconstruction and disaster-proofing. However, in the current condition, the network would not be able to withstand another storm. The old service lines are now connected with several joints, making them more susceptible to faults.[9] The final reconstruction and upgrade should be done as soon as possible, to minimize secondary impacts on the economy and to restore reliable power supply in priority areas and for essential services.[10]

10. **Status of donor coordination.** The Government of Tonga is leading the response efforts with the assistance of nine humanitarian clusters and support from bilateral partners, nongovernment organizations, and other development partners. The government implemented a range of social protection programs to support households, including provision of additional funds to the elderly and people with disabilities. In the immediate aftermath of the cyclone, donor contributions and insurance payouts to the government's emergency fund were used to finance many of the most urgent recovery needs, and several government ministries reallocated resources to cyclone recovery activities.[11]

---

[7] Government of Tonga. Forthcoming. *Post Disaster Rapid Assessment, Tropical Cyclone Gita.* Nuku'alofa.

[8] ADB. 2013. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to the Kingdom of Tonga for the Outer Island Renewable Energy Project.* Manila.

[9] During the first full month of operations with temporary connections (April 2018), the network was experiencing more than double the average number of faults in 2017. TPL predicts that power outages will increase as the temporary connections deteriorate and fail.

[10] The project area also includes essential services such as the main hospital and the main water supply bore field.

[11] The government's emergency fund receives annual appropriations for natural hazards and other emergencies. The fund played an important role in the government's immediate response and early recovery efforts, and disaster contingent financing and catastrophe risk insurance payments were channeled through its structures.

11. The energy sector reconstruction costs are estimated at $45.9 million, and after contributions from the government's emergency fund (about $3.3 million) and New Zealand MFAT ($2.1 million for immediate repairs, and $7.7 million for reconstruction), $34.5 million remains unmet. The World Bank and other development partners will focus on other sectors, such as housing and education.

12. **ADB response to Cyclone Gita.** On 15 February 2018, the government requested to withdraw $6.0 million in disaster contingent financing (a $3.1 million loan and $2.9 million grant) under ADB's Pacific Disaster Resilience Program, which was established in December 2017 to help strengthen the disaster resilience of Samoa, Tonga, and Tuvalu.[12] ADB released the $6 million budget support within 24 hours from the request. On 22 February, ADB provided an additional $1 million under the Asia Pacific Disaster Response Fund for humanitarian relief efforts. These funds were deposited in the government's emergency fund and were an essential part of its immediate response and early recovery efforts.

13. On 12 April 2018, the government requested further ADB support to access $8.8 million under the Asian Development Fund 12 Disaster Response Facility for the (i) reconstruction and upgrade of electricity network infrastructure damaged by the cyclone ($6.8 million), noting ADB's comparative advantage and ongoing projects in the sector that would allow rapid implementation of the project; and (ii) setup of a new disaster contingent financing facility ($2.0 million) to replace previous disaster contingent financing under ADB's Pacific Disaster Resilience Program, which was drawn down in full in response to Cyclone Gita.[13]

14. **Value added by ADB assistance.** In response to the government's request, ADB's emergency assistance will finance the reconstruction and "building back better" of priority areas of the Nuku'alofa electricity network, identified as the most affected by the cyclone. The project will restore access to reliable electricity supply, reduce losses, and upgrade the network to a higher standard of disaster resilience.

15. ADB has sufficient presence and expertise in the country and offers comparative advantage for energy sector infrastructure reconstruction. TPL is an implementing agency for two ongoing ADB projects in Tonga: (i) OIREP, to install solar power generation and expand the electricity network in Ha'apai, 'Eua, and Va'vau Islands (footnote 8); and (ii) Cyclone Ian Recovery Project, to rehabilitate and climate- and disaster-proof the electricity network on Ha'apai Islands.[14]

[12] ADB. 2017. *Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Loans, Policy-Based Grants, and Technical Assistance Grant Pacific Disaster Resilience Program*. Manila.

[13] As provided in the Concessional Assistance Policy, in the event of a disaster, an Asian Development Fund-only country can access up to 100% of its annual performance-based allocation from the Disaster Response Facility. Tonga's request of $8.8 million corresponds to 100% of the 2018 performance-based allocation for Tonga. A new disaster contingent financing facility ($2 million) will be processed through regular procedures for policy-based lending, targeting approval in early 2019.

[14] ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Grant and Administration of Grant to the Kingdom of Tonga for the Cyclone Ian Recovery Project.* Manila.

B. Impact and Outcome

16. The project is aligned with the following impacts: more reliable and safe energy services; and more reliable and safe buildings and structures to improve services and maintenance, save on energy usage, and increase resilience to disasters.[15] The project will have the following outcome: reliable electricity supply in Nuku'alofa priority areas restored.[16]

C. Output

17. **Priority sections of Nuku'alofa electricity network rehabilitated and upgraded.** The project will restore reliable access to the electricity supply network and make it more resilient to extreme weather and disasters by repairing the utilities and upgrading them to a higher standard of disaster resilience. The "building back better" activities will follow the overall plans for the upgrade of the Nuku'alofa network, as described in the Nuku'alofa Network Upgrade Project (NNUP) due diligence report.[17] The proposed NNUP includes five contiguous subproject areas and 56 villages in Nuku'alofa. MFAT has committed NZ$11 million (about $7.74 million) for the NNUP under a separate project. MFAT and ADB funds will address the immediate priority areas under the NNUP that were identified during the PDRA preparation as those most affected by Cyclone Gita.[18]

18. The project will rehabilitate the existing high-voltage and low-voltage overhead network using disaster-resilience measures such as modern aerial-bundled conductors, and install new 11/0.4-kilovolt distribution transformers and new underground service cables to customer premises with new smart meters.[19] The project will be viewed as part of a rolling program to eventually reconstruct all of Nuku'alofa, resulting in better access to reliable power supply, reduction in losses, and less damage during cyclones.

D. Summary Cost Estimates and Financing Plan

19. The project is estimated to cost $9.42 million (Table 1). Detailed cost estimates by expenditure category and by financier are in the project administration manual (PAM).[20] The major expenditure items include works and equipment.

Table 1: Summary Cost Estimates

($ million)

Item		Amount[a]
A.	**Base cost:[b] rehabilitation and upgrade of electricity network**	**8.50**
B.	**Contingencies[c]**	**0.92**
	Total (A+B)	**9.42**

[a] Includes taxes, duties, and environment levy of $1.14 million, financed by the government through exemption.
[b] In April 2018 prices.
[c] Physical contingencies computed at 7% for civil works. Price contingencies computed at an average 3% on foreign exchange costs and 6% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

Source: Asian Development Bank estimates.

[15] Ministry of Finance and National Planning. 2015. *Tonga Strategic Development Framework 2015–2025.* Nuku'alofa.
[16] The design and monitoring framework is in Appendix 1.
[17] Pacific Region Infrastructure Facility. 2016. *Due diligence of Tonga Nuku'alofa Distribution Network Upgrade Project.* Sydney. https://bit.ly/2IGTzgw
[18] Areas 1 and 2 as identified in the NNUP due diligence report. The project will cover 1,736 customer connections, including households (about 8,500 people), businesses and services.
[19] In Tonga, 11 kilovolt network is referred to as high-voltage network.
[20] Project Administration Manual (accessible from the list of linked documents in Appendix 2).

20. The government has requested a grant not exceeding $6.8 million from ADB's Special Funds resources (Asian Development Fund) to help finance the project.

21. The summary financing plan is in Table 2. ADB will finance the expenditures in relation to equipment, civil works, and labor, and the government will provide the equivalent of $1.14 million as in-kind contribution in the form of exemption on taxes, duties, and environment levy. TPL will provide the equivalent of $1.48 million as in-kind contribution in the form of staff time for design, supervision, installation of works, and management and administration of the project. The government will make the proceeds of the grant available to TPL under a subsidiary grant agreement on terms and conditions satisfactory to ADB.

Table 2: Summary Financing Plan

Source	Amount ($ million)	Share of Total (%)
Asian Development Bank		
Special Funds resources (ADF grant, Disaster Response Facility)	6.80	72.2
Tonga Power Limited	1.48	15.7
Government	1.14	12.1
Total	**9.42**	**100.0**

ADF = Asian Development Fund.
Source: Asian Development Bank estimates.

22. Climate adaptation is estimated to cost $994,000. ADB will finance 90% of adaptation costs. Details are in the PAM (footnote 20).

E. Implementation Arrangements

23. The Ministry of Finance and National Planning (MFNP) will be the executing agency, and TPL will be the implementing agency. The Project Coordination Committee for the NNUP will provide oversight;[21] it is co-chaired by the MFNP and the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications; and includes the Ministry of Public Enterprises, TPL, MFAT, and ADB as members.

24. TPL will carry out the engineering design, bidding process, supervision, and installation work. It will disburse the grant proceeds in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and will follow ADB's financial management guidelines. Procurement will follow ADB's Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

25. ADB will finance some of the incremental labor costs that TPL incurs in carrying out the project civil works, using force account. It is expected that direct contracting of goods will be based on the results of parallel competitive procurement actions conducted by TPL for the MFAT-funded project under NNUP, provided that such results are consistent with ADB's Procurement Policy and Procurement Regulations. ADB will undertake due diligence on such MFAT-funded procurement activities prior to authorizing the use of direct contracting to the selected suppliers.

[21] Both ADB and New Zealand investments in energy sector reconstruction will be carried out under the NNUP structure.

26. The implementation arrangements are summarized in Table 3 and described in detail in the PAM (footnote 20).

Table 3: Implementation Arrangements

Aspects	**Arrangements**		
Implementation period	July 2018–June 2020		
Estimated completion date	30 June 2020		
Estimated grant closing date	31 December 2020		
Management			
(i) Oversight body	Project Coordinating Committee for the Nuku'alofa Network Upgrade Project, including: (i) Ministry of Finance and National Planning (co-chair) (ii) Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (co-chair) (iii) Ministry of Public Enterprises (iv) Tonga Power Limited (v) New Zealand Ministry of Foreign Affairs and Trade (vi) ADB		
(ii) Executing agency	Ministry of Finance and National Planning		
(iii) Key implementing agency	Tonga Power Limited		
(iv) Implementation unit	Tonga Power Limited, 36 staff (including 25 line mechanics)		
Procurement	Direct contracting: conductors and other electrical hardware	2	$3.3 million
	Direct contracting: poles	1	$1.3 million
	Direct contracting: vehicles	4	$0.6 million
	Direct contracting: tools and safety equipment	1	$0.1 million
	Shopping: service line trenching	1	$0.26 million
	Force account (reimbursement): Tonga Power Limited staff labor	1	$0.53 million
Advance contracting	Advance contracting will be used for the procurement of all required goods, works, consulting, and non-consulting services.		
Disbursement[a]	The grant proceeds will be disbursed following ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank.
[a] For guidance, refer to ADB. 2017. *Loan Disbursement Handbook 2017*. Manila.
Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

27. The project supports critical post-Cyclone Gita reconstruction priorities, and Tonga's Climate Change Adaptation and Disaster Risk Management priorities. The investment activities have been screened and found appropriate. Implementing the project activities will allow for learning through monitoring and evaluation and for replication elsewhere in Tonga. The project is coordinated with and supported by other development partners, and the approach will further improve development coordination. The government's PDRA is the basis for selection of project outputs (footnote 7). Alternative technical configurations were considered. The proposed configuration is considered technically optimal under the local conditions to climate- and disaster proof the electricity network.

B. Economic and Financial

28. In accordance with ADB's Disaster and Emergency Assistance Policy (2004), economic and financial analysis may be finalized before project implementation.[22] The economic and financial analysis carried out for the NNUP will be used as the basis to finalize the analysis for the project. ADB will allocate sufficient resources to undertake the economic and financial due diligence.

29. An economic analysis will be carried out in accordance with ADB's Guidelines for the Economic Analysis of Projects.[23] It will cover the macroeconomic and sector context and include a discussion of rationale for public investment, demand analysis, alternatives and least-cost analysis, cost–benefit analysis, sustainability analysis, distribution analysis, and sensitivity and risk analyses, and it will include a clear discussion of the without- and with-project scenarios.

30. A financial analysis will be prepared in accordance with ADB's Guidelines on the Financial Management and Analysis of Projects.[24] Financial viability will be assessed by comparing the incremental costs and revenues over the life of the project. In the event of insufficient cost recovery, an assessment of the financial sustainability will be conducted, to assess (i) the coverage of incremental recurrent costs required to ensure sustainability of the project benefits, and (ii) the capacity of the executing and implementing agency to fund these costs.

C. Governance

31. A financial management assessment was conducted for the project in accordance with ADB's Financial Management Guidelines and Financial Due Diligence: A Methodology Note.[25] The assessment considered the MFNP as the executing agency and TPL as the implementing agency. The MFNP and TPL have satisfactory experience with implementing ADB-funded projects.

---

[22] ADB. 2004. *Disaster and Emergency Assistance Policy.* Manila.
[23] ADB. 2017. *Guidelines for the Economic Analysis of Projects*. Manila.
[24] ADB. 2005. *Guidelines on the Financial Management and Analysis of Projects.* Manila.
[25] ADB. 2015. *Financial Management and Analysis of Projects*. Manila. https://www.adb.org/documents/financial-management-and-analysis-projects; ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila. https://www.adb.org/sites/default/files/institutional-document/33540/files/financial-due-diligence.pdf

32. The overall inherent and project risk is considered *moderate*, given that a project management unit (PMU) will be set up and the new staff will be trained on ADB's disbursements, financial reporting, and auditing requirements. A key risk mitigating measure will be to ensure that a dedicated full-time qualified project accountant forms part of the PMU in TPL.

33. TPL has a functioning procurement unit and has successfully undertaken procurement of similar goods for other ADB-funded projects. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, MFNP, and TPL. The specific policy requirements and supplementary measures are described in the PAM (footnote 20).

D. Poverty, Social, and Gender

34. The reconstruction and "building back better" of the immediate priority areas of Nuku'alofa electricity network will help provide a more reliable and disaster-resilient power supply in the community. This greatly benefits the households that are dependent on reliable energy supply for the continuation of their income-generating and productive activities. Women especially will be able to continue performing their multiple roles, including household care, more efficiently.

35. The project is proposed as *some gender elements*. Gender activities and targets during project implementation include (i) at least 30% women's participation and involvement in all project consultations during implementation, to determine specific issues affecting women and to propose effective mitigating measures; (ii) the implementation of HIV/AIDS and gender-sensitivity awareness sessions to prevent sexual harassment and gender-based violence at work among all TPL ground staff and contractors; and (iii) at least 30% women's participation in training programs related to maintenance and operation. The women will be prioritized for work opportunities and key positions. Particularly, the model of employing women as line workers will be replicated in the project for additional TPL workers.[26] The proposed PMU within TPL will be responsible for the project's gender and social activities, with capacity-building support provided by the project.

E. Safeguards

36. In compliance with ADB's Safeguard Policy Statement (2009), the project's safeguard categories are as follows.[27] TPL PMU will be responsible for safeguard compliance of the project during implementation.

37. **Environment (category B).** An environmental assessment and review framework has been prepared with the environmental safeguard requirements applicable to the proposed project.[28] The disaster-response nature of this project entails that the site-specific initial environmental examination will be conducted at the early stage of project implementation and before the physical execution of the subprojects. Most of the project activities will be limited to upgrades of existing facilities, and the project is not expected to have any significant and irreversible impacts. The adverse impacts are likely temporary and localized, and can be managed with the proposed mitigation measures and the Code of Environmental Practice, which are included in the environmental assessment and review framework and the initial environment examinations.

[26] The Outer Island Renewable Energy Project (footnote 8) engaged a total of 12-line workers, of whom 10 are women, to expand the electricity network in Ha'apai, Eua, and Va'vau Islands. TPL worked with technical and vocational colleges in targeting women applicants. This is a successful engagement model adopted by TPL.

[27] ADB. Safeguard Categories. https://www.adb.org/site/safeguards/safeguard-categories.

[28] Environmental Assessment and Review Framework (accessible from the list of linked documents in Appendix 2).

38. **Involuntary resettlement (category C).** The project will not involve involuntary resettlement or land acquisition. All reconstruction work will take place entirely within state-owned land. The power poles and lines are situated along dedicated road reserves. The underground service cables will be confined to the customers' premises. The installation of distribution transformers will take place on existing, TPL-owned land.

39. **Indigenous peoples (category C).** The project will not impact distinct and vulnerable groups of indigenous peoples as defined under ADB's Safeguard Policy Statement (2009). The beneficiaries in the project sites are part of mainstream Polynesian society.

F. Summary of Risk Assessment and Risk Management Plan

40. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.[29]

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Future tropical cyclones or other natural hazards will be more frequent or more intense.	The project will ensure that infrastructure investments meet standards for cyclone resilience.
Poor coordination between executing and implementing agencies, and the agencies with oversight roles.	The implementing agency will regularly update the project coordinating committee, and the agencies with oversight roles, through a rigorous monitoring, reporting, and evaluation framework.
The implementing agency's administrative capacity and resources may be stretched, undermining the implementation and effectiveness of the emergency assistance.	Adding capacity to the implementing agency's project management unit will strengthen implementation and coordination capabilities, thereby ensuring effective delivery of the emergency assistance.
Insufficient budget provision for repair and maintenance	The implementing agency will ensure that budgetary provision is set aside for the continuing repair and maintenance of project investments, which will be monitored through the fixed assets management system.

Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

41. The government and the MFNP have assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and grant documents.

42. The government and the MFNP have agreed with ADB on certain covenants for the project, which are set forth in the draft grant agreement and project agreement.

[29] Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

V. RECOMMENDATION

43. I am satisfied that the proposed grant would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the grant not exceeding $6,800,000 to the Kingdom of Tonga from ADB's Special Funds resources (Asian Development Fund) for the Cyclone Gita Recovery Project, on terms and conditions that are substantially in accordance with those set forth in the draft grant and project agreements presented to the Board.

Takehiko Nakao
President

6 June 2018

DESIGN AND MONITORING FRAMEWORK

Impacts the Project is Aligned with

More reliable and safe energy services (Tonga Strategic Development Framework 2015–2025)[a]

More reliable and safe buildings and structures to improve services and maintenance, save on energy usage, and increase resilience to disasters (Tonga Strategic Development Framework 2015–2025)[a]

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Reliable electricity supply in Nuku'alofa priority areas restored.	By June 2020: a. 1,736 customer connections with reliable and disaster-resilient service[b] 2017 baseline: 0 b. Average number of faults in regular months reduced by 50% 2017 baseline: average 66 faults per month c. Technical losses reduced to 5% 2017 baseline: 22%	a. Project progress reports b. NNUP progress reports	Future tropical cyclones or other natural hazards more frequent or intense
Output Priority sections of Nuku'alofa electricity network rehabilitated and upgraded.	By June 2020: a. 16 km of HV network rehabilitated and upgraded 2017 baseline: 0 b. 35 HV/LV transformers installed 2017 baseline: 0 c. 58 km of LV network rehabilitated and upgraded 2017 baseline: 0 d. 1,736 customer connections climate- and disaster-proofed[b] 2017 baseline: 0 e. At least 30% women's participation in at least two community consultations on project progress and updates during implementation, potential socioeconomic and environmental impacts during construction, and proposed mitigating measures. 2017 baseline: 0	Project progress reports	Poor coordination between executing and implementing agencies, and the agencies with oversight roles.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	f. 197 TPL staff (150 men and 47 women) with increased knowledge on gender sensitivity and respect at work; and minimum of 50 concerned TPL staff and contractors, including at least 30% women, with increased knowledge on power budget management and asset management maintenance. 2017 baseline: 0		
Key Activities with Milestones **Priority sections of Nuku'alofa electricity network rehabilitated and upgraded.** 1. Preparation of bidding documents (by July 2018) 2. Completion of due diligence—safeguards and economic and financial assessments (by September 2018) 3. Evaluation of bids and award of contracts (by October 2018) 4. Manufacturing and delivery of materials (by May 2019) 5. Construction (by June 2020)			
Project Management Activities Establishment of project management unit by August 2018			
Inputs ADB: $6.8 million (grant) TPL: $1.5 million Government: $1.1 million			

ADB = Asian Development Bank, HV = high voltage, km = kilometer, LV = low voltage, NNUP = Nuku'alofa Network Upgrade Project, TPL = Tonga Power Limited.

[a] Ministry of Finance and National Planning. 2015. *Tonga Strategic Development Framework 2015–2025.* Nuku'alofa.

[b] This will comprise existing households and businesses. Sex-disaggregated data on the households will be collected prior to project completion.

Source: Asian Development Bank.

LIST OF LINKED DOCUMENTS
http://www.adb.org/Documents/RRPs/?id=52129-001-2

1. Grant Agreement
2. Project Agreement
3. Summary Assessment of Damage and Needs: Energy Sector
4. Project Administration Manual
5. Contribution to the ADB Results Framework
6. Emergency Assistance Coordination
7. Country Economic Indicators
8. Summary Poverty Reduction and Social Strategy
9. Risk Assessment and Risk Management Plan
10. Environmental Assessment and Review Framework

Supplementary Document

11. Involuntary Resettlement Guidelines