

Early Warning System

ADB-50059-001

Power Transmission and Distribution Efficiency Enhancement Project

Early Warning System

Power Transmission and Distribution Efficiency Enhancement Project

ADB-50059-001

Quick Facts

Countries	Nepal
Financial Institutions	Asian Development Bank (ADB)
Status	Active
Bank Risk Rating	B
Voting Date	2016-07-22
Sectors	Energy, Infrastructure, Law and Government
Investment Type(s)	Grant
Investment Amount (USD)	$ 1.50 million

Project Description

DESCRIPTION

Electricity is a necessary requirement for accelerating the economic development of any country and is considered an important input to improve quality of life. Overall, the electricity demand has far outgrown the supply, leading to load curtailment and increased dependence on imports from India in recent times. The peak suppressed demand in Nepal in FY2013 2014 has been around 1,200 megawatt (MW) as against installed capacity of 787 MW, hence resulting in a deficit of about 440 MW due to non-availability of generation. Government has plans to generate additional 10,000 MW in the next 10 years. About 63% of the population in Nepal has access to electricity but the supply quality is unreliable and inadequate. The government has recognized the immediate need for reinforcement and upgrade of outdated distribution systems crucial to deliver the required energy to the customers even if the generation and transmission lines are in place. In this regard, the need for immediate distribution network enhancement is included in the government's action plan to address energy crisis and provide universal access to reliable and efficient electricity for all by 2030. This will contribute in promoting sustainable energy for all (Sustainable Development Goal #7) and Nepal's Intended Nationally Determined Commitments for the United Nations Framework Convention on Climate Change.ADB's Nepal country partnership strategy 2013 2017 supports the government's development objective of accelerated and inclusive economic growth. It seeks to address the infrastructure bottlenecks in the key areas such as energy services and creating an enabling environment for increased business and employment opportunities. ADB's support for the energy sector in Nepal has largely focused on generation and transmission with some distribution extension. This project will be ADB's first investment in Nepal specifically targeting energy efficiency through distribution system enhancements measures.

PROJECT RATIONALE AND LINKAGE TO COUNTRY/REGIONAL STRATEGY

The Asian Development Bank (ADB) will provide a loan to the Government of Nepal (the government) to meet the immediate needs of electricity distribution network in Kathmandu Valley and strengthening of associated transmission lines by the Nepal Electricity Authority (NEA). Major sections of the existing distribution network in the valley were constructed decades ago and despite significant increase in electricity demand and the number of consumers, minimal reinforcement of the distribution network has been carried out. The project will enhance the distribution capacity and improve reliability and quality of electric supply in the Kathmandu Valley by reducing distribution system overloads and technical and commercial losses, which currently is about 20%. The project will also support implementation of other system efficiency upgrades and energy efficiency measures such as advanced grid operations software, distribution system automation, and smart metering. System efficiency improvements and loss reductions will improve NEA's financial health, while customers will benefit from a reliable and improved quality of electricity supply and reduced dependence on diesel generators to meet their daily electricity needs. Operational upgrades will also facilitate integration of new generation capacity scheduled to come on-line during the next three to four years. The project can be replicated in other cities in the country.

CONSULTING SERVICES

The TA will require 31 person-months of international consultants and 46 person-months of national consultants. Consultants will have expertise in the areas of system planning, transmission, distribution, smart grids, supervisory control and data acquisition system (SCADA), economic and financial analysis, social and environmental safeguard, and procurement. ADB will hire consultants through a firm using quality- and cost-based selection process (90:10). Some individual consultants with expertise in areas such as intelligent energy network technologies, geographic information systems, safeguards, finance and economics may be recruited in instances where pre-existing knowledge of local conditions is required and the firm may not be able to rapidly mobilize experts with relevant expertise. Output-based (lump-sum) contracts will be considered for all consulting services where possible. Consultants' selection will be done in accordance with the Guidelines on the Use of

Investment Description

- Asian Development Bank (ADB)

TA 9144-NEP: Power Transmission and Distribution Efficiency Enhancement Project
Clean Energy Fund under the Clean Energy Financing Partnership Facility US$ 1.50 million

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

CONTACTS

Responsible ADB Officer Acharya, Jiwan S.
Responsible ADB Department South Asia Department
Responsible ADB Division Energy Division, SARD
Executing Agencies
Nepal Electricity Authority (NEA)
P. O. Box 5352
Kathmandu
Nepal

Bank Documents

- Power Transmission and Distribution Efficiency Enhancement Project: Concept Paper [Original Source]
- Power Transmission and Distribution Efficiency Enhancement Project: Initial Poverty and Social Analy [Original Source]
- Project Disclosure PDF

Other Related Projects

- ADB-50059-002 Power Transmission and Distribution Efficiency Enhancement Project
- ADB-50059-003 South Asia Subregional Economic Cooperation Power Transmission and Distribution System Strengthening