



Matatirtha- Dukuchhap 220 kV

Transmission Line Project



Background

Nepal Electricity Authority has identified Matatirtha-Dukuchhap 220 kV Transmission Line Project to cope with the growing demands in the Kathmandu valley in terms of reliability. The underground section starts from the existing Matatirtha substation to 220 kV switching substation. The overhead section then starts from a 220 kV switching substation at Matatirtha to bifurcation point at Maranchuli, Dakshinkali Municipality via 220 kV two circuit Lattice Structure Transmission line along the forest area.



Sector:
Energy



Location:
Kathmandu

Objectives

Improve reliability and capacity of Kathmandu Valley's power transmission infrastructure to meet increasing electricity demand and ensure uninterrupted supply.

Salient Feature:

- Length: 13.3 Km (1.3 km underground section and about 12 km overhead section)
- No. of Circuits: 2
- No of Tower: 34
- Conductor: ASCR Twin Moose
- Starting Point: Matatirtha Substation
- Ending Point: Dukuchhap Substation

Project Outcome



Encourage power producers to invest in this corridor for hydroelectricity generation.



Improved reliability and quality (Voltage/Frequency) of power supply



Reduced transmission and distribution loss



Job creation and economic development

Financial Indicators

**Estimated
Project Cost**

**\$ 15.46
Million**



**Debt to Equity
Ratio**
80:20

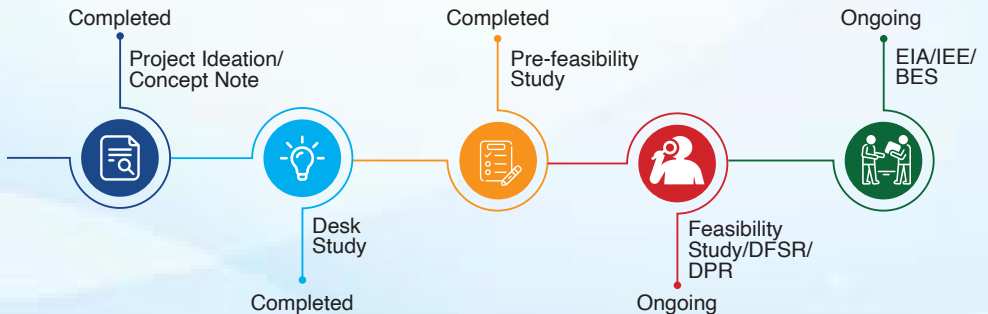
Financing Requirements

Project Seeking Finance

Project Financing Plan		
Source	Amount (Million USD)	Share of Total (%)
Equity (GoN and NEA)	3.09	20.00%
Remaining for Lending	12.37	80.00%

Seeking lenders to finance 80% of the total project cost as a debt.

Project Implementation Timeline



Project Layout

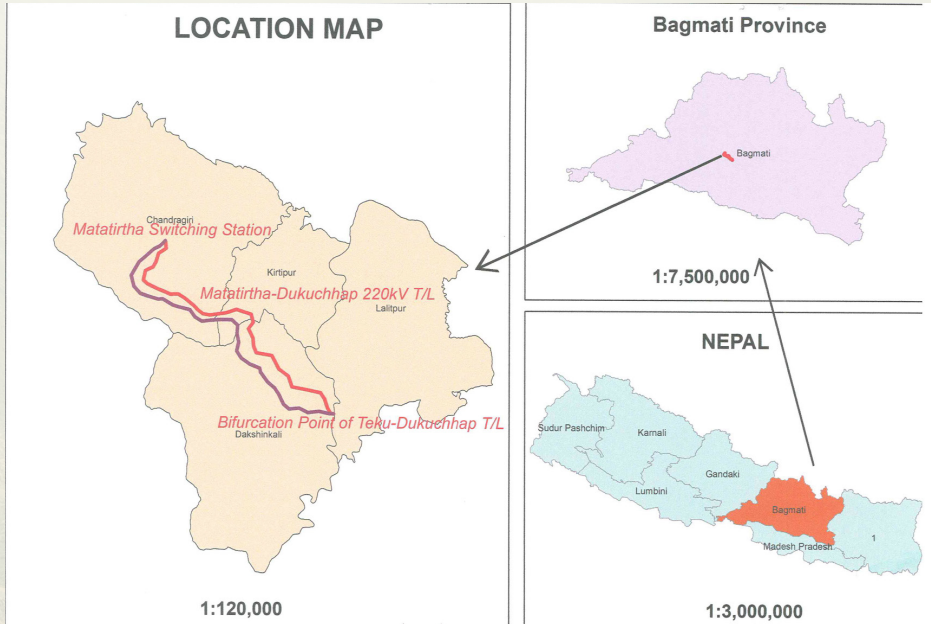


Fig1. project layout

Relevant Agencies

- Ministry of Energy, Water Resource and Irrigation (MoEWRI)
- Nepal Electricity Authority (NEA)

About the Agency

Nepal Electricity Authority (NEA):

The Nepal Electricity Authority (NEA) is Nepal's government-owned utility overseeing electricity generation, transmission, distribution, and sales. It aims to provide reliable, affordable, and sustainable energy solutions, fostering national development and enhancing citizens' lives. Its mission is to ensure reliable electricity supply, promote renewables, and maintain environmental sustainability. Its objectives include expanding access, improving infrastructure, promoting renewables, driving economic growth, ensuring equitable distribution, and fostering transparent operations. It is pivotal in Nepal's energy sector for sustainable development.

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