



Damauli – Kushma – Bafikot 400 kV Double Circuit

Transmission Line Project



Background






The proposed Damauli – Kushma – Bafikot 400 kV Double Circuit Transmission Line Project lies in Tanahun, Syangja, Kaski, Parbat, Baglung, East Rukum, Gulmi and West Rukum district. Around 59 hydropower projects with the total of 3796.863 MW installed capacity have been proposed in the vicinity of these proposed transmission line project and have received the survey license, construction license and some of them are in operation phase. Out of 59 hydropower projects, 20 have received the survey license and 17 have received the construction license.

LOT 1:

Damauli – Kushma – Bafikot 400 kV Double Circuit Transmission Line

LOT 2:

- Expansion of Damauli 400 kV GIS substation
- New 400 (GIS)/200(AIS) kV substation at existing Kushma
- 400/132/33 kV New GIS substation at Bafikot

 <p>Location: Tanahun, Syangja, Gulmi, Kaski, Parbat, Baglung, East Rukum and West Rukum Districts</p>	 <p>Land Required: 984.24 hectares</p>	 <p>Sector: Energy</p>	 <p>Location: Tanahu, Parbat, and West Rukum districts</p>	 <p>Land Required: 18.1 hectares</p>
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Objectives

The Damauli-Kushma-Bafikot 400 kV transmission line project aims to enhance power transmission system reliability and meet the electricity demand in Tanahu, Syangja, Kaski, Parbat, Baglung, Gulmi, East Rukum, and West Rukum Districts.

The project involves extending two 400 kV line bays at the Dhamauli Substation, new 400 kV/200 kV line at the Kushma AIS Substation and constructing the 400/132/33 kV New GIS Substation at Bafikot.

Salient Feature:

- Length, Damauli to Kushma: 78 Km
- length, Kushma to Bafikot: 148 Km
- Number of Circuits: 2 (Double)
- Conductor: ASCR “Quad Moose”
- No. of Towers: 658
- Nominal Span: 400 m
- Starting Point: Damauli Substation
- Ending Point: Bafikot Substation
- 400 kV GIS and 200 kV AIS
- Busbar System
- Outdoor equipment
- Indoor equipment
- Fire prevention system, Illuminations, Earthing, Substation lightning protection

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



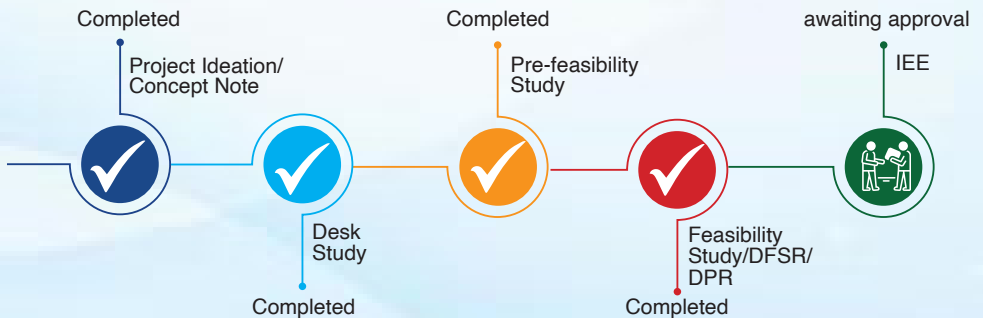
Financing Requirements

Project Seeking Finance (Debt Finance)

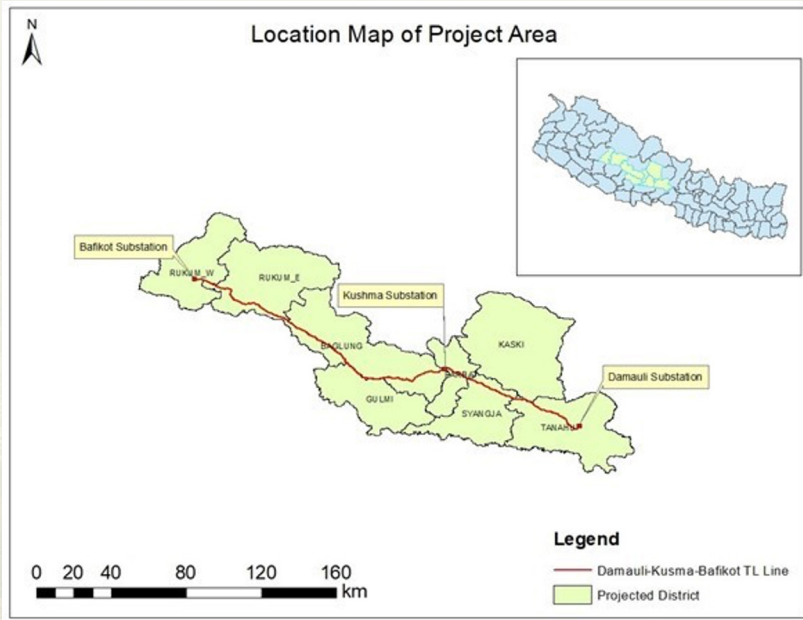
Project Financing Plan		
Source	Amount (Million USD)	Share of Total (%)
Equity (GoN and NEA)	77	20.00%
Remaining for Lending	308	80.00%

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

Project Implementation Timeline



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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