

DORDI KHOLA HYDROPOWER PROJECT

LAMJUNG, NEPAL



PROJECT PROGRESS REPORT

MAY 2014



Himalayan Power Partner Limited

Energy Sector Research, Development & Consulting Services

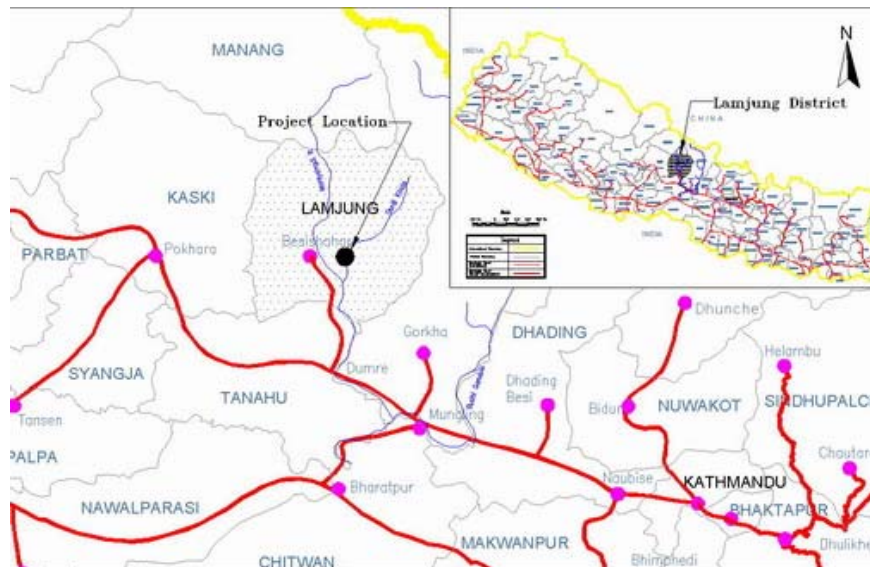
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1 Introduction

Dordi Khola Hydropower Project is a Run-of-River type hydroelectric project with generating capacity of 27 MW. The project is being developed by Himalayan Power Partner Ltd. (HPPL) Kathmandu, Nepal. HPPL is promoted by IME Group and later joined by NRN Investment Ltd. to develop Dordi Khola Hydropower Project with equity sharing in 49:51 ratios.

2 Project Location/Access

The project area lies in Lamjung district in Western Development Region of Nepal. It is connected from Kathmandu by 170 km all weather metallic roads. The project components are located in Chiti, Bansar and Dhodeni VDCs. Headworks site is connected by fair weather roads totaling about 12 km via Ramchowk Phant near the powerhouse site. A link road of length about 500 m to the powerhouse site will be constructed by the Project. Similarly, a link road to the headworks site will be constructed by the project.



3 Project Description

The project comprises of diversion weir with free flow spillway and two bayed under sluice, side Intake structure, feeding canals, two bayed settling basin, water conductor steel pipe, headrace tunnel, surge shaft, penstock pipe, powerhouse and tailrace closed canal. The project will generate about 142.319 GWh of energy annually after outage and will be evacuated to Integrated Nepal Power System (INPS) through a 132 kV single circuit Transmission Line (TL)

up to the proposed Udipur Hub of Nepal Electricity Authority (NEA) located opposite side of the powerhouse location, on the right bank of Marsyangdi River. The Length of Transmission Line will be 1.2 km.

The main features of the project are given as below:

- Gross Head : 212.0 m
- Design Discharge : 15.28 m³/sec
- Installed Capacity : 27.0 MW
- Total Annual Energy (before outage) : 148.249 GWh
- Water Ways
 - Closed Conduit/Steel pipe (Ø2.65m) : 3237 m
 - Headrace Tunnel (Ø3.3m) : 2662 m
 - Penstock Pipe (Ø2.3m) : 700 m
- Powerhouse Type : Surface
- Turbine Type : Francis (3x9 MW)
- Tailrace Channel (3.5mx2.5m) : 334m
- Transmission Line 132 kV/single circuit : 1.2 km
- Access Road (construction by Project):
 - Permanent : 1.25 km
 - Temporary : 2.57 km
- Total Project Cost : NRs. 3,595 million
- Total Capitalized Cost (Inc. IDC) : NRs. 4,230 million

4 Key Dates

- PPA Signed on 1st Asar 2069 (15th June, 2012)
- Generation License obtained on 23rd Asar 2068 (7th July, 2011)
- Facility Agreement signed on 19th Asar 2070 (3rd July, 2013)

5 Project Cost Estimate and Financing

- The total project cost including physical and price contingencies has

been estimated at NRs 3,615 million before financing. Total capitalized cost including IDC will be NRs. 4,230 million.

- Equity: (Promoters HPPL and NRNIL) = 25% of the Total project Cost.
- Debt: Consortium of banks (Lead bank: Prime Commercial Bank Limited and Co-lead bank: Nabil Bank Limited) = 75% of the total project cost.

6 Project Construction Schedule

- Preconstruction works such as infrastructure development, land acquisition, preparation of tender documents etc. are scheduled to finish by 30th September, 2014. The detailed progress of the preconstruction works till date are given in figure 1.
- The major civil works construction is scheduled to start from October 2014.
- Commercial Operation Date (COD) of the plant is fixed for June 15, 2017.

The project implementation schedule is shown in figure 2.

Figure: 1

Implementation Schedule for Pre-construction works and its progress

ID	Task Name	Start	Finish	2012												2015	Remarks
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1				
1	Preconstruction Activities	Thu 01/11/12	Fri 31/10/14														
1.1	Review and Updation of DPR	Thu 01/11/12	Fri 31/05/13														Completed
1.2	Submission of Draft DPR	Fri 31/05/13	Fri 31/05/13														Completed
1.3	Submission of Final DPR	Sat 01/06/13	Sun 30/06/13														Completed
1.4	Land Acquisition and Statutory clearances	Mon 01/07/13	Tue 31/12/13														HW and Powerhouse completed, Along water way targeted to complete within June 2014 (Remark: Delaying), Application for permission of tree felling at Satipatal Community Forest is processed
1.5	Infrastructure Development	Mon 16/12/13	Fri 31/10/14														Started with delay, Construction works of Service road and bridge at HW is going on.
1.6	Preparation of Tender documents	Mon 01/07/13	Fri 31/01/14														Completed
1.7	Floating of Tender	Sat 01/02/14	Mon 31/03/14														EOI and technical proposal were arrived for package 3 contract. Due to the land acquisition problem it is being delayed.
1.8	Bid Evaluation	Tue 01/04/14	Sat 31/05/14														Not started
1.9	Award of work	Sun 01/06/14	Thu 31/07/14														Not started
1.10	Mobilization	Fri 01/08/14	Tue 30/09/14														Not started

As per DPR Schedule

HPPL Progress

7 Monthly Progress Status (April 2014)

- The project is on the stage of infrastructure development activities. On the basis of the tender design and documents prepared by Entura Hydro Tasmania, the company has categorized 4 contract packages for the civil works for the project. Out of these four contract packages, the first package contract no. DHP/Civil/01 (Service Road, Bridge and Land Development) has already been awarded and opening of service road and a bridge construction have already been started.
- Entura Hydro Tasmania has been appointed as the consultant for the detailed design and project management of the project. A contract agreement between Entura Hydro Tasmania and Hima Layan Power partner Limited has been signed on 30th April, 2014. Site visit with the experts of Entura Hydro Tasmania is scheduled from 7th to 10th May, 2014 for the thorough inspection before starting the detailed engineering design. As per the schedule of Entura Hydro Tasmania, it will take about 11 months for detailed engineering design, however, construction of major civil works will start from October, 2014 and it has been committed that before construction, drawings will be made available as per requirement of the site.
- The process of land acquisition is going on. Required land for Headworks area and powerhouse area have been purchased completely, however, land along the waterway alignment is partially purchased and still left to purchase the remaining. Out of 151 ropanis of required land 75 ropanis has been purchased.
- Formal process has been started for felling of trees lying along the penstock pipe alignment. About 151 trees of dia. more than 10 cm shall be felled down during the construction of surge tank and for penstock pipe laying. The request letter for it is now in the department of forest and soon will be forwarded to district office for field verification.
- 40% of the equity amount has been deposited in the bank by the end of Chaitra, 2070 as per the commitment.