PEOPLES ENERGY LIMITED

KHIMTI-2 HYDROELECTRIC PROJECT

(48.8 MW)

PROGRESS REPORT

February 2026

dssPEOPLES ENERGY LTD.

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Contact Details:

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LIST OF ABBREVIATIONS

PEL	Peoples Energy Ltd.
PHCL	Peoples Hydro Co-operative Ltd.
PPA	Power Purchase Agreement
NEA	Nepal Electricity Authority
K2HEP	Khimti-2 Hydroelectric Project
HEP	Hydroelectric Project
MW	Mega Watts
RCOD	Required Commercial Operation Date
HCE	Hydro-Consult Engineering Limited
CWTW	Chongqing Water Turbine Works Co. Ltd.
IEE	Initial Environmental Examination
EPC-F	Engineering Procurement Construction-Financing
TOR	Term of Reference
LC	Letter of Credit
FC	Financial Closure
DFO	District Forest Office
KV	Kilo Volt
PH	Power House
MoU	Memorandum of Understanding
BDR	Basic Design Report

CHAPTER – 1 PREAMBLE

1.1 Introduction

Peoples Energy Limited is developing Khimti-2 Hydroelectric Project (48.8 MW) located in the border of Ramechhap and Dolakha districts of Bagmati Province. Khimti River is a tributary of Tamakoshi a major branch of Saptakoshi river system of Nepal. The Khimti River originates at EL. 4500m and converges with the Tamakoshi River at EL. 600m. The total drainage area of the Khimti River is 492.4km^2, and the drainage area in front of the intake and powerhouse is 295.34km^2 and 351.4km^{2}respectively. The river section from the dam site to powerhouse is about 7km long. The ridges on both banks are at EL. 2,300~3,000m; the riverbed at the dam is at EL. 1,627m; the riverbed at the powerhouse tailrace is at EL. 1,278m. The run-of-river development scheme is selected.

The headworks site is located at Rasnalu/Gokulganga Rural Municipality of Ramechhap and Jiri Municipality of Dolakha district whereas the powerhouse site is located at Simlep and Hawa/Tamakoshi Rural Municipality of Dolakha District. The headwork is located about 150m downstream the confluence of Jiri Khola and Khimti Khola with headrace alignment passing along the right bank of Khimti Khola and powerhouse site also located on the right bank.

Geographical Coordinates of Khimti-2 Hydroelectric Project

Coordinates	From	To
Latitude	27°33'07"N	27°35'13"N
Longitude	86°09'26"E	86°14'18"E

1.2 Objective of this report

Objective of this report is;

- To update the status of various development activities completed and being undertaken in implementation of 48.8 MW Khimti-2 Hydroelectric Project.
- To update the status of schedules and planning
- To bring forward the difficulties & issues being faced / envisaged at site to the notice of concern authorities and stakeholders

1.3 Key Dates and Milestones

S/N	Activity	Date	Remarks
1.	Survey License Issuance (27.2 MW)	2069 Kartik 15	Closed
2.	Feasibility Study Completed (48.8 MW)	2070 Falgun	Closed
3.	Updated Survey License Issuance (48.8 MW)	2070 Chaitra 7	Closed
4.	IEE ToR Approval	2071 Bhadra 28	Closed
5.	Grid Connection Agreement	2071 Kartik 13	Closed
6.	IEE Report Approval	2072 Kartik 22	Closed
7.	Power Purchase Agreement (PPA) with NEA	2072 Ashwin 14	Closed
8.	Application for Generation License	2072 Kartik 11	Closed
9.	Public Notice of Generation License	2073 Kartik 9-10	Closed
10.	Generation License Issuance	2073 Paush 25	Closed
11.	Generation License Transfer from PHCL to PEL	2073 Falgun 5	Closed
12.	Land Transfer from PHCL to PEL	2074 Jestha 11	Closed
13.	IEE Report Approval transfer from PHCL to PEL	2074 Ashoj 2	Closed
14.	PPA Transfer from Peoples Hydro to Peoples Energy Limited	2074 Ashad 22	Closed
15.	Financial Closure	2074 Ashoj 8	Closed
16.	Updated IEE Report	2076 Poush	Closed
17.	Civil work contract signing with High Himalaya Hydro Construction Pvt. Ltd.	2077 Mangsir 15	Closed
18.	Design Consultant Contract signing with Hydro Tunneling and Research Pvt. Ltd.	2077 Mangsir 25	Closed
19.	Civil Contractor mobilization to site	2077 Poush 14	Closed
20.	Shifting of Grid Connection Point for Power Evacuation to (loop-in, loop-out Substation at	2078 Magh	Closed

	Bhimsensthan, Ramechhap with S/C 132 kV line near PH site)		
21.	Forest and Government Land Approval/Cabinet approval	2078 Jestha	Closed
22.	Explosive License	2078 Ashad	Closed
23.	132 KV Transmission Line IEE Approval	2080 Ashoj 12	Closed
24.	132 KV Transmission Line Survey License	2079 Asar 23	Closed
25.	132 KV Transmission Line Survey License (1st Amendment)	2079 Magh 4	Closed
26.	132 KV Transmission Line Generation License	2081 Ashad 10	Closed
27.	132 KV Transmission Line Land Acquisition		Closed
28.	Contract award to Global Hydro GmbH for Electromechanical Works	2078 Falgun10	Closed
29.	Contract awarded to CBMEW Pvt. Ltd for HM works (Gates and hoists)	2078 Falgun 25	Closed
30.	Contract awarded to Cream-KHS JV for HM works (Penstock, bifurcation and expansion joint)	2079 Baisakh 20	Closed
31.	Contract awarded to Royal Construction Pvt. Ltd for Transmission Line Construction Works	2080 Bhadra 20	Closed
32.	Generation License Amendment	2080 Karthik 1	Closed
33.	Required Commercial Operation Date (RCOD)	2081 Shrawan 17	Closed

1.4 Bank Consortium

Financial closure (FC) for the development of Khimti-2 HEP was concluded with the bank consortium of erstwhile ten Class 'A' Commercial Banks of Nepal with Sanima Bank as the lead bank, on September 24th, 2017.

1.5 The Employer

Peoples Energy Ltd. (PEL), previously Peoples Hydro Co-operative Ltd. (PHCL), is the developer of Khimti-2 Hydroelectric Project, situated at Dolakha and Ramechhap districts. PEL obtained the survey license for the project on 2012/10/31. After, feasibility level investigation was concluded and the Power Purchase Agreement (PPA) was signed with Nepal Electricity Authority (NEA) on 2015/10/01. Generation license was obtained for the project on 2017/01/06 by PHCL, and later transferred to PEL on 2017//02/16.

1.6 Local Contractors for Site Infrastructures

PEL has engaged several local contractors for the construction of site infrastructures as pre-construction activities such as access track opening and slope protection works for Access Road, drainage and stone soling for improvement of Access Road, Project Camp, Boundary wall construction and construction of three motorable bailey bridges etc. To execute the mentioned works PEL has engaged some of the local contractors employed at site are:

- **For Bridge Construction (Three bridges over Khimti Khola)**
  - S.K. Construction (for Dharapani Bridge at Dam Site)- Bridge I
  - Likhu Nirman Sewa (for Hodampa Bridge for HRT adit site)- Bridge II
  - Him Sagarmatha Construction (for Palate Bridge/PH site)-Bridge III

- **For Road Access and Gabion Works**
  - Bhimeshwor Nirman Sewa
  - Chandrama Nirman Sewa
  - Dangdunge Nirman Sewa
  - Dharmasthali Suppliers
  - Dipshree Construction
  - Greenland Construction
  - Khani Nirman Sewa
  - Kritim Nirman Sewa
  - Likhu Nirman Sewa
  - Moti Construction Pvt. Ltd.
  - New Jagriti Nirman Sewa
  - Peoples Nirman Sewa
  - Prakriti Nirman Sewa
  - Rambole Construction Pvt. Ltd.
  - Serakali Builders Pvt. Ltd.
  - Seti Bhumi Nirman Sewa
  - Sunuwar Nirman Sewa
  - Jiri Nirman Sewa
  - Mama Bhanja Construction
  - Jatteshwor Nirman Sewa
  - Evergreen Construction

- **For Camp Construction**
  - Edgemark Consultancy Pvt. Ltd.
  - Jyoti Shree Interior Pvt. Ltd.

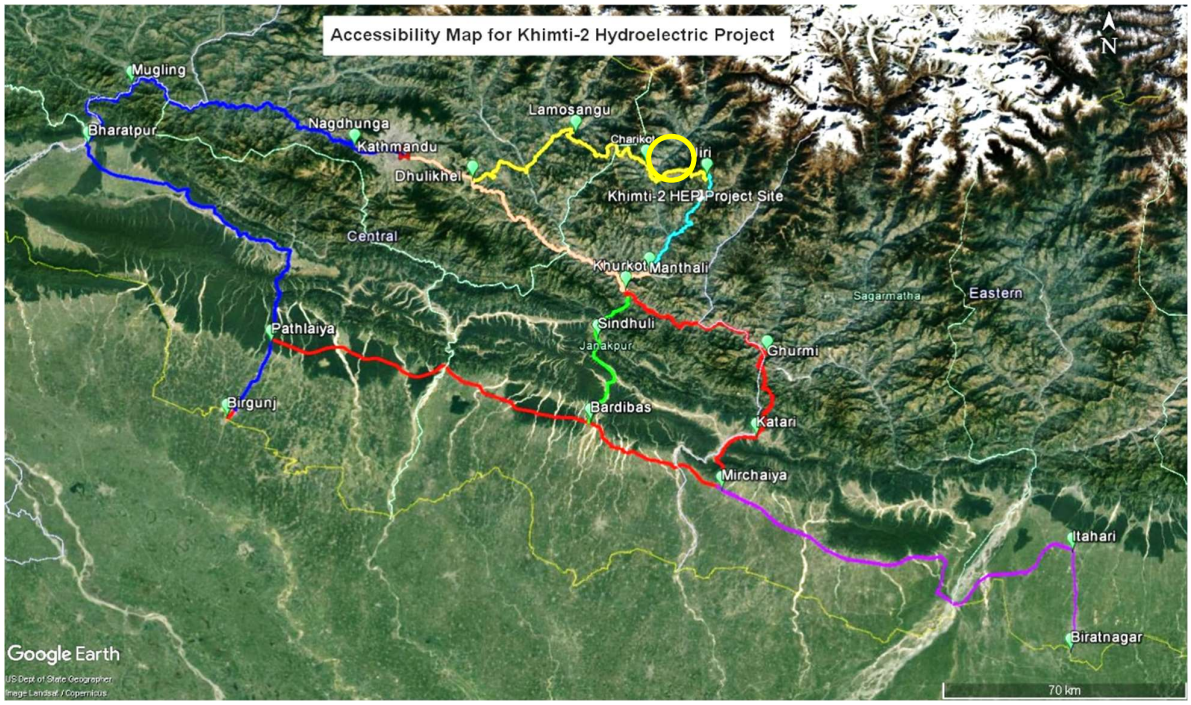
- **Transmission Line-Construction Power**
  - New Satakri Khimti Construction Pvt. Ltd.

1.7 Access to the Site

The project site is accessible from Kathmandu by the following roads:

i. Kathmandu – Dhulikhel - Dolalghat – Lamosangu - Charikot - Jiri – Headworks site (198 km length)

ii. Kathmandu – Dhulikhel – Nepalthok – Khurkot – Manthali – Khimti – Betali – Bhimsenthan – Powerhouse site (174 km length)



CHAPTER – 2 TECHNICAL FEATURES OF THE PROJECT

2.1 Salient Features of the Project

Project Name: **Khimti -2 Hydroelectric Project**
Installed Capacity: 48.8 MW
Type of Project: Run off River (ROR)
Location: Jiri Municipality and Tamakoshi Rural Municipality of Dolkha District (Previous Jiri, Thulopatal and Hawa VDC) of Dolkha District)
Gokulganga Rural Municipality of Ramechhap District (Previous Rasnalu VDC of Ramechhap District)

Comparative Salient Features of the Project:

Project Features	Features Details	Remarks
General		
Project Boundary	27°33'07"N to 27°35'13"N 86°09'26"E to 86°14'28"E	
Gross Head	351.5m	
Rated Head	341.643m	
FSL	1633.00 masl	
Normal TWL	1275.96 masl	
Minimum TWL	1275.25 masl	
Hydrology		
Turbine Centre Line	1279.3 masl	
Catchment area at Intake site	317.94 km^2	
Catchment area at Powerhouse	351.4 km^2	
Average Flow	27.36 m^3/sec	
Minimum Monthly flow	4.45m^3/sec	
Design Discharge(Q_{40})	16.11 m^3/sec	
Design flood at intake site (Q_{100})	1165 m^3/sec	
Design flood at intake site (Q_{1000})	1439 m^3/sec	
Diversion Structure		
Type of diversion structure	Ogee weir with U/ S vertical face and under sluice gates	
D/S Slope	1:0.7	
Weir crest level	1633.00masl	
Crest length of Ogee section	7.50 m	
Total Crest Length of Weir	7.50 m	

Width of Weir	7.50 m	
River bed Level	1627.00 masl	
Undersluice		
Length of undersluice base	53m	
Width of undersluice	7.2m	
Dimension of undersluice (L x B)	2 Nos. 5m x 6m	
Undersluice crest level of gate	1628 masl	
Undersluice Gate	Radial gate, 2nos. 3m x 3m	
Stilling Basin		
Stilling Basin for Ogee Weir (L x B)	41.50 m X 38.20 m	
Stilling basin for Undersluice (L x B)	15.7 m*7.20	
Floor level of stilling basin	1623.00 masl	
End level of stilling basin	1623.00 masl	
Intake		
Side Intake orifice	4 nos. 2.3(H) x 3.0(B)	
Invert Level	1630.0 masl	
No. of openings	4	
Intake Discharge	16.11m3/s	
Settling Basin		
Location	**Surface**	
Type	Intermittent conventional flushing	
Number of compartments	2	
Effective length	72.0m	
Total width of basin	19.0 m	
Width of one compartment	8.0 m	
Height in rectangular section	8.0 m	
Side slope of the compartment	1:1	
Flushing system	Intermittent	
Longitudinal slope of flushing channel	1:50	
Invert level at the beginning of flushing channel	1621.10 masl	
Invert level at the end of flushing channel	1620.85 masl	
Width of the flushing channel	1.20 m	

Flushing Culvert (L x H)	2m x 2.5m	
Invert level at the beginning of flushing culvert	1621 masl	
Size	72m (L) x 8.0m (W) x 8.0m (H) 3.4m hopper depth	
Flushing	Gated Box Culvert 1.2m (W) x 1.2m (H) x 60m (L)	
Primary Gravel Trap		
Size (B x H)	8.60m x 8.50m	
Length	20.5m	
Flushing Culvert		
Size (B x H)	1.5m x 1.8m	
Length	21.5m	
Number of culverts	1	
Flushing Gate	Two, 2.1m x 1.8m	
Invert level of Opening	1627.10 masl	
Level at beginning of culvert	1627.10 masl	
Level at Flushing end	1626.67 masl	
Secondary Gravel Trap		
Size (B x H)	8.0m x 8.30m	
Length	18.10m	
Flushing Culvert		
Size (B x H)	1.5m x 1.8m	
Length	28.0m	
Number of culverts	1	
Flushing Gate	Two, 2.1m x 1.8m	
Invert level of Opening	1626.26 masl	
Level at beginning of culvert	1626.26 masl	
Level at Flushing end	1625.14 masl	
Water Conveyance System (Headrace Tunnel)		
Shape of Tunnel	Inverted D type	
Length	6.321 km	
Finish Diameter	3.50m	
Finish Height	3.90m	
Gradient of HRT	1:500	
Tunnel Portal Level	1621.80 masl	
Surge shaft bottom	1599.80 masl	

No. of bends in HRT	7	
Support	Shotcrete and Concrete lining	
Adit Tunnels		
No. of Adit Tunnels	3	
Total Length of Adit Tunnel	522.67 m	
Diameter	4.40m (W) x 4.55m (H)	
Shape	Inverted D type	
Phulping Adit		
Adit -1 Length	284m	
Adit -1 HRT junction chainage	3+383.25m	
Adit -1 Portal level	1615.00 masl	
Hawa Adit		
Adit -2 Length	200m	
Adit -2 HRT junction chainage	6+784.6m	
Adit -2 Portal level	1580.00 masl	
Adit -3 Powerhouse Area		
Adit -3 Length	40m	
Adit -3 HRT junction chainage	7+473.55m	
Adit -3 Portal level	1278.52 masl	
Pressure Shaft/Tunnel		
Diameter	2.3m	
Total Length (with bends)	954.23m	
Valve house to VIP-1	53.95m	
Vertical Shaft-1 (VS-1)	157.39m	
Surface Penstock Length	207m	
Vertical shaft-2 (VS-2)	67m	
Pressure shaft up-to Manifold (From VS-2)	110.65m	
Diameter of pressure after manifold	1.3m	
Lining	Shotcrete wire mesh and bolts lining	
Surge Shaft		
Diameter	6 m	
Shape	Circular	
Height	65m	
Surge Tunnel –HRT junction chainage	6+719.05m	

Invert level of surge tunnel junction	1599.80 masl	
Invert level of ventilation tunnel portal	1667 masl	
Powerhouse		
Type of Power house	**Surface**	
Powerhouse cavern dimension (l x B x H)	45m (L) x 16m (W) x 32m (H)	
Turbine Axis Level	EL. 1279.30 masl	
Machine floor level	EL. 1283.42 masl	
Tailrace		
Type	Free Flow Box Culvert	
Length	209.26m	
Shape	Rectangular	
Size	Culvert: 4.00m (B) x 2.5m (H)	
Outlet Level	1275.25 masl	
Turbine		
Type of turbine	Pelton	
Shaft configuration	Vertical Axis	
No. of turbine	3	
Turbine Output	16.451 MW per unit	
No of nozzle	6	
Rated speed	600 rpm	
Rated Efficiency	91.0%	
Generator		
Type	Synchronous 3 Phase	
Rated Power	19.176 MVA	
Rated output capacity per unit	16.267 MW	
Power Factor	0.85	
Voltage	11kV	
Frequency	50 Hz	
No. of Units	3	
Efficiency	97.6%	
Transformer		
No. of Transformer	2 Nos., three-phase	
Capacity	30/31.5 MVA ONAN/ with fan	
Voltage ratio	11/132 kV	

Efficiency	99.3%	
Transmission line		
Length	Approx. 2 km to Loop in Loop Out Switching Station at Bhimsensthan Constructed to evacuated its power on NEA Double Circuit 132 KV TL (Going from Garjyang to 220/132KV Substation at New Khimti)	
Connection	Loop In Loop Out Switching Station at Bhimsensthan	
Type	132 kV, Single circuit	
Cable	ASCR, Bear	
Power and Energy Generation		
Wet Energy	219.5 GWh	
Dry Energy	40.8 GWh	
Total Energy	260.3 GWh	
Firm Energy	107 GWh	
Financial		
Total Project cost	NRs. 8.646 billion	
Revenue	NRs. 1.4 billion	
B/C Ratio	1 .41	
IRR	16.01 %	
Access to the site		
Kathmandu- Charikot – Jiri	198 km (188 km blacktopped)	
Jiri to Dam site	11 km Gravel Road	
Dam Site to Powerhouse site	16 km Gravel Road	
Birgunj-Bardibas-Khurkot-Manthali-Kirnetar/Khimti	290 km	
Khimti to Powerhouse site	27 km Gravel Road	

Progress CHAPTER – 3 PROGRESS DETAILS

3.1 Summary on Construction of Site Infrastructures

S/N	Project Activity	Description	Status/Progress
	CONTRACTOR/CONSULTANT'S PROGRESS		
1.	Civil Construction work	• **High Himalaya Hydro Construction (3HC)**	• Contract Signing on 30th November 2020 with High Himalaya Hydro Construction (3HC) • Contractor Mobilized to site on 17th March 2021 • Army mobilized to site on 15th June 2021
2.	Design Consultant	• **Hydro Tunneling and Research**	• Contract Signing on 10th December 2020 with Hydro Tunneling and Research • IFC drawings of various Civil Components are being issued. Total 114 IFC drawings have been issued. • Balance design work along with structural design is ongoing.
3.	Electromechanical works	• **Global Hydro GmbH**	• Contract signing of EM works done at 22nd February 2022.
4.	Hydromechanical Works	• **CMW India** • **Cream KHS JV**	• Contract signing between CBM India and Peoples Energy Limited for the entire gates and hoists as hydromechanical components of headworks on 9th March 2022 • Contract signing between Cream KHS JV and Peoples Energy Limited for the complete works of penstock and accessories on 3rd of May 2022
5.	132 KV Transmission Line works	• **Royal Construction Pvt. Ltd**	• IEE final report has been approved from Ministry of Energy, Water Resources and Irrigation • Land acquisition works- 100% completed • Rebar, frames for foundation work of dead-end tower at Loop in Loop out Substation received at site. • Contract awarded to Royal Construction Pvt. Ltd on 6th September for Design, Manufacture, Shop test, Supply and Delivery of Plant and Equipment for S/C 132 kV Transmission line.
	ACCESS ROAD		

6.	Dharapani to Dam site (Ramechhap side)	• **1.0 km**	• **1.0 km** of Track opening works – **Completed**.
7.	Intake-Dharapani Road (Dolakha Side)	• **0.5 km**	• **200 m** of Track Opening towards intake – completed. • **250 m** of access road to Inlet portal **completed**.
8.	Burke – Hodampa/Phulping (Ramechhap side)	• **2.5 km**	• **2.5 km** track opening completed Gabion works and Maintenance of Burke-Bhage road- **Completed.**
9.	Thulopatal – Hodampa/Phulping - Gaighat (Dolakha side)	• **2.0 km**	• **2.0 km** Track opening, Gravel or Stone paved - **Completed.**
10.	Hanwa - Palate (Dolakha side)	• **5.5 km**	• **5.5 Km** Track opening, Gravel or Stone paved – **Completed.**
11.	Bhimsenthan – Palate/Powerhouse site new track (Ramechhap side)	• **0.5 km**	• **0.5 km** of Track opening, Gravel or Stone paved – **Completed.**
12.	Bhimsenthan – Palate/Powerhouse site Old track to be upgraded (Ramechhap side)	• **3.0 km**	• Track opening, Gravel or Stone Paved- **Completed**.
	PROJECT CAMP		
13.	Camp Building Construction works	• **Total 12 Buildings**	• Construction work **completed**. • Furnishing works **completed**.
14.	Water Supply System	• **Drinking water to Project Camp**	• Construction of water supply system completed and is in operation.
		• **Drinking water to Locals**	• 9 no of Public Tap stand constructed. • Reservoir tank construction is **completed**. • Water supply to locals is in operation.
	33KV TRANSMISSION LINE FOR CONSTRUCTION POWER		
15.	Transmission Line for Construction power	• **9 km 33 kV sub-transmission line**	• Contract awarded to New Satakri Khimti Construction • Transmission line work for construction power **completed** • Electricity connection at all site is in operation.
	BAILEY BRIDGE		
16.	Dharapani Bridge (Bridge I)	• **42.672m**	• Civil works **Completed**. • Erection work **Completed**. • **The Bridge in operation.**
17.	Hodampa Bridge (Bridge II)	• **33.528m**	• Civil works **Completed**. • Erection work **Completed**. • **The Bridge in operation.**
18.	Hawa-Palate Bridge (Bridge III)	• **51.816m**	• Civil works **Completed**. • Erection work **Completed**. • The Bridge in operation.
	OTHER ACTIVITIES		

19.	Hydrology and Sediment Study	• **Hydrology and Sediment Study**	• Sediment collection & Analysis by HydroLab-**Completed**. • Discharge Measurement & Hydrological Analysis by Recham Consult -**Completed**.

3.2 Administrative Works

20.	**ADMINISTRATIVE WORKS**	• **Various administrative issues**	• Forest Land Approval-**Completed** • Land acquisition: 100% **completed** • Survey License for Transmission Line (Power Evacuation): **Completed.**
		• **Shifting grid Connection for Power Evacuation**	• Approval received for loop in loop out connection shifting grid connection **completed.**
		• **Updated IEE Report**	• Final approval received: **Completed**
21.	**LOCAL STAKEHOLDERS' ENGAGEMENT**	• **Local issues**	• Local Stakeholders Engagement through various discussion addressing the project related environmental and social issues are continued • Implementing various social and local infrastructural development works

3.3 Design and Physical Model Study

22.	**PHYSICAL HYDRAULIC MODEL STUDY**	• **Model of Revised Headworks**	• Consulting contract award to Hydrolab • Provided required documents • completed model construction of structures. • All the details of the model are finalized and model run successfully completed. • waiting for the final report of the hydraulic model design.

3.4 Progress Work in Detail

3.4.1 Civil Construction work

The civil construction contract work was awarded to High Himalaya Hydro Construction on 30th November, 2020. The Employer issued Notice to proceed to the contractor on 1st December 2020. Major Activities by the civil contractors at different sites are listed below:

3.4.2 Headworks Site:

All major work of headworks in completed.

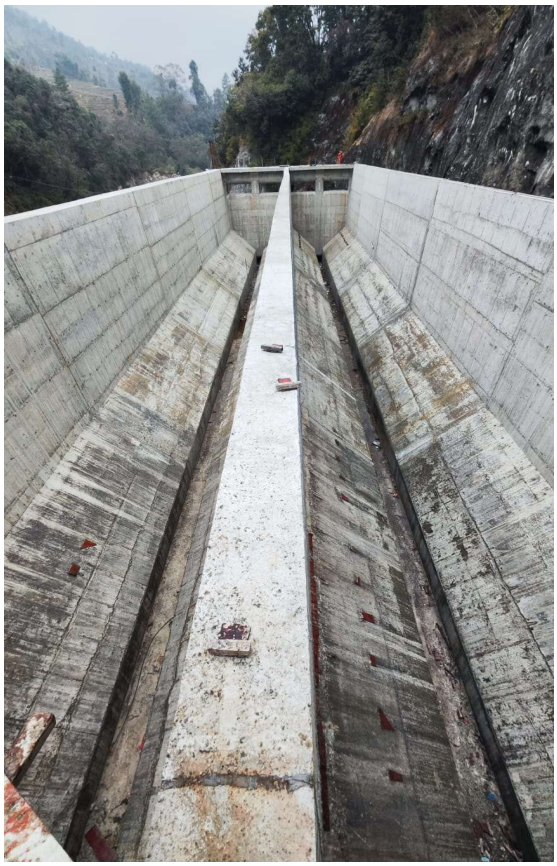
- **Intake structures:** Overall Intake Structure 100% completed.
- **Primary Gravel Trap:** Major concrete works completed. Trash rack installed, flushing chamber almost finished, epoxy grouting in progress.
- Concrete work on Transition part shear wall completed (up to level 1637 m) (only 2 panels remaining).

- Approach canal D/S side concrete work is completed (panel 1 and panel 2).
- **Secondary Gravel Trap:** Fully complete, including gates and trash racks.
- **Transition part (Bifurcation):** Concrete work fully completed.
- **Transition part of primary gravel trap**- concrete work totally completed.
- **Weir**- Upstream and downstream cutoff walls completed. Inclined weir and backfilling completed. Ogee weir concrete works completed 60 cm thickness except last lift. Upstream apron base slab completed. Cleaning works completed.
- **Slope weir:** boulder riprap and concrete works of panel 1,2,3 and 4 completed. Boulder riprap of the panel 5 continues.
- **Under sluice structure:** The major works of the under-sluice structure have been completed, except for the last panel approaching towards the approach culvert.
- **Fish Passes Gate:** Out of four panels, one panel has been completed.
- **River diversion**: Successfully diverted to the under-sluice.
- **Left Bank protection wall** – Panels 16–29 completed; backfilling ongoing.
- **Middle flood wall**: Panels 4 and 5 completed; Panel 6 completed up to the 4th lift.
- **Approach culvert structures:** Excavation, rock bolting, and concreting completed up to 1633 m. Concrete works completed for Panels 1–10, 12 and 13. Panel 11 completed up to the first lift of the shear wall.
- **Approach culvert (Bifurcation part):** All panels (P-1 to P-8) completed.
- **Spill way:** Compaction and P.C.C works under progress.
- **Settling Basin Flood wall:** Panels 1–13 completed, including concrete works, backfilling, compaction, and subsurface drainage.
- **Settling basin –**Concrete work completed of all 5 panels include the Concrete work for the inlet gate has been completed.
- **Settling basin flushing gate:** Rebar and concrete work continues.
- **Head Pond:** 1st lift concrete work at the headpond has been completed; only one lift of concreting work now remains.
- **Approach culvert spillway:** concrete works of panel 1 to panel 4 is completed.
- **Silt passes gate:** Rebar work continues and concrete work continues.
- **Upstream apron:** Boulder riprap completed.
- **Sloping apron:** Concrete infill completed.
- **Settling Basin Transition part-** Concrete work fully completed (up to slab).
- **Sand flushing culvert:** concrete works of panel 1 to panel 5 is completed.

Overall cumulative headworks progress:- 98% Completed.

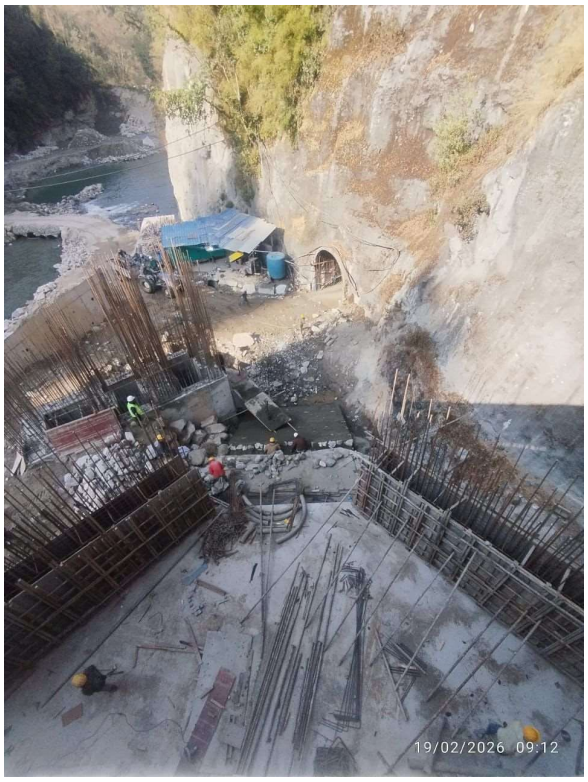
Intake and Weir

Ogee weir formworks and Concreting work



Settling Basin

Boulder riprap at downstream sloping weir



Completion of the inclined stone masonry work at transition section

Rebar and formworks installation at headpond is ongoing

Installation of the Radial Gate at headworks

Complete river diversion through intake approach culvert secondary gravel trap flushing

Culvert

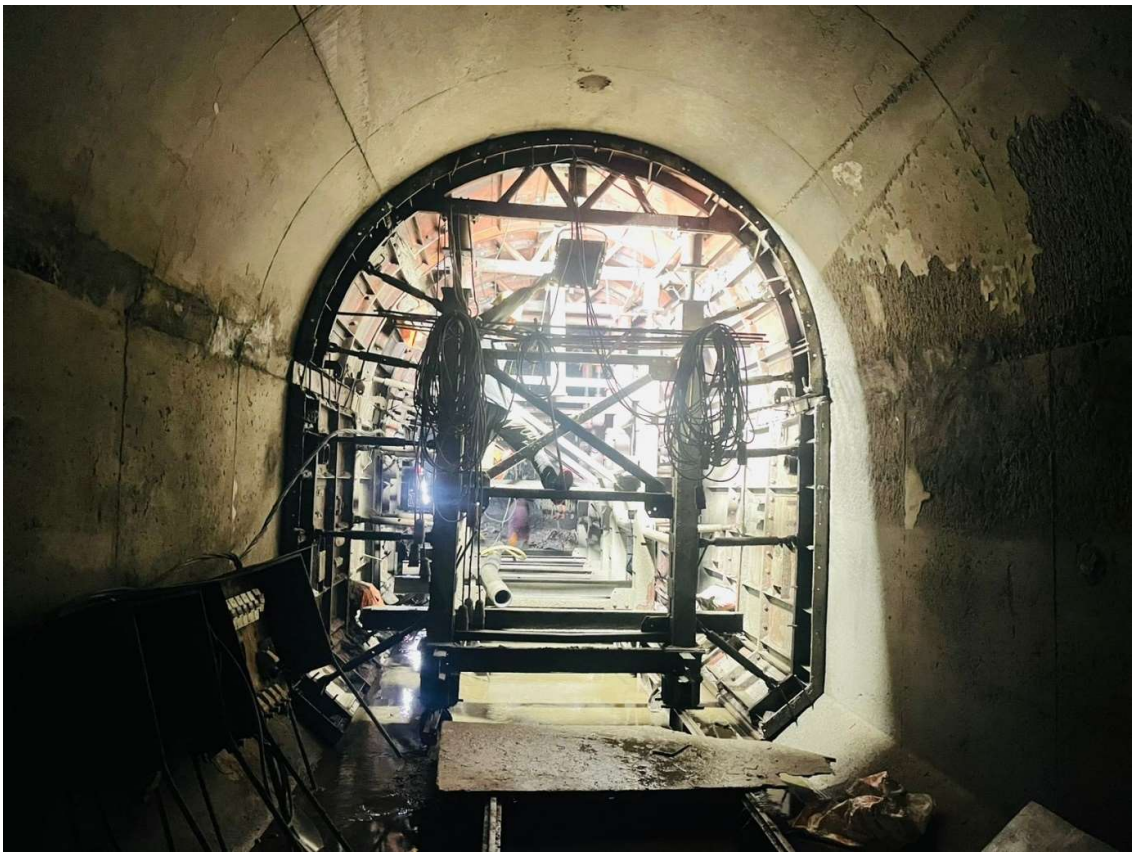
Completion of river diversion

3.4.3 **Tunnel Site**:

HRT Inlet site (HRT Face-1)

- Excavation of 1671.5 reached and completed.
- Successful breakthrough of Face 1 and Face 2.
- Final lining works ongoing.
- Shotcrete works completed reached 1010 m.
- Invert concrete work is 100% complete up to the required chainage of 1+630 m, achieving the final 43.1 m milestone in this month.
- Full concrete (gantry) completed up to 0+ 384.25 m completed out of 0+620 m.

Concrete lining work in Face 1.



Gantry Preparation for the lining work in Face 1

HRT Face -2

- Tunnel excavation work at U/S HRT from Adit 1 junction: 1+293.5 m reached and completed.
- Invert concrete work completed up to 1+327.21 m out of 1+334.25 m.
- Full concrete (gantry) completed up to 0+ 587.04 m out of 0+592 m by which full concrete work completed except junction work.
- Hybrid concrete completed up to 13.702.

Face 2: Full lining work in face 2 completed

Face 2: Phulping brook shaft junction formworks continue

HRT Face-3

- Tunnel excavation work at U/S HRT from Adit 1 junction: 1+550 m reached and completed. Lining works ongoing.
- Invert concrete work completed up to 1+234 m out of 1+547.15 m.
- Full concrete (gantry) completed up to 0+173.2 m out of 0+775 m.

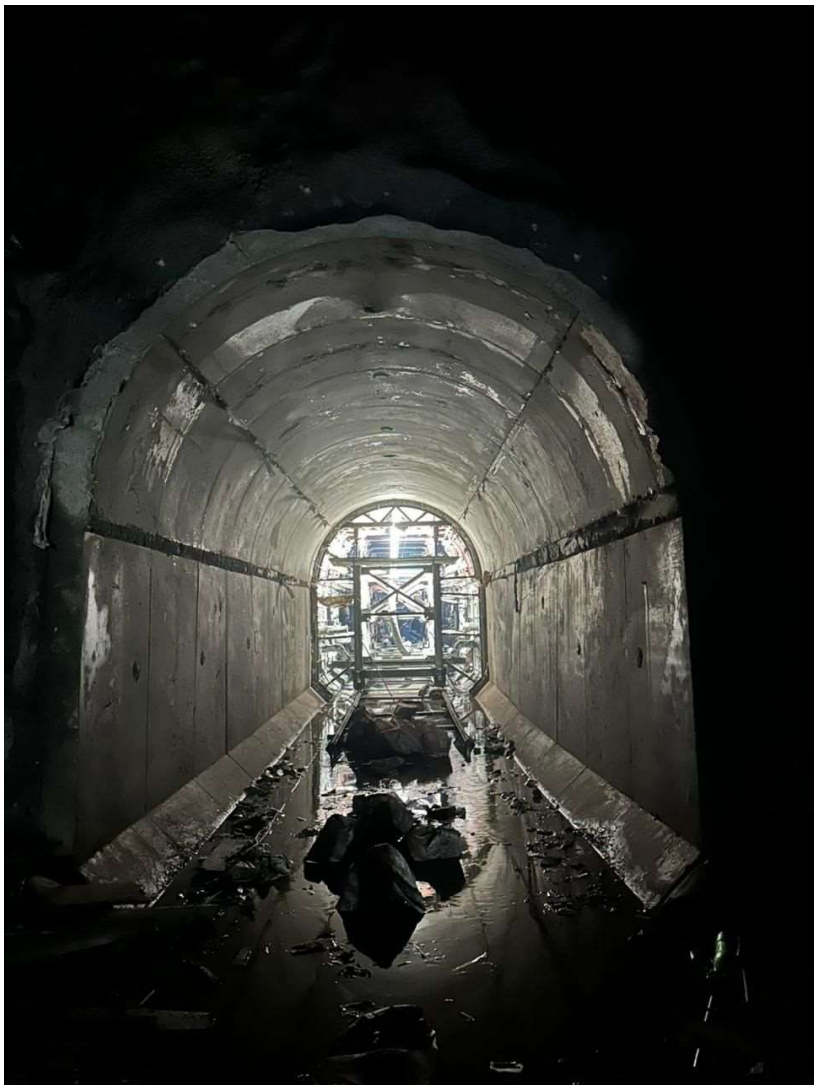
Full Concrete work in Face 3

Adit-2 Portal (Surge Tunnel/HRT Outlet) site:

- Adit Tunnel excavation work: **0+200 m face chainage reached** and completed.

HRT Face-4

- Excavation work at U/S HRT from Adit 2 junction: **1+1751 m face chainage reached** and completed.
- Excavation work at Vertical Shaft (VS1) **0+157.39 m face chainage reached and** completed.
- Vertical Shaft-1 (VS-1) breakthrough on 27th February, 2024.
- Excavation work at D/S HRT from Adit 2 junction: **0+030 m face chainage reached** and completed.
- Excavation work at bifurcation to vertical shaft from Adit 2: **0+055 m face chainage reached** and completed.
- Excavation work at Ventilation Tunnel: **0+104 m face chainage reached** and completed.
- Excavation work at Surge Shaft: **65 m**
- Concrete work in surge shaft is completed.
- Surge Shaft to HRT connecting: **43.25 m.**
- Invert concrete work 1753.85 m reached and completed.
- Full concrete (gantry) completed up to 0+349.02 m completed out of 0+634 m.



Face 4 full lining work

Khimti-2, Hydroelectric Project 48.8 MW
Ramechhap/ Dolakha

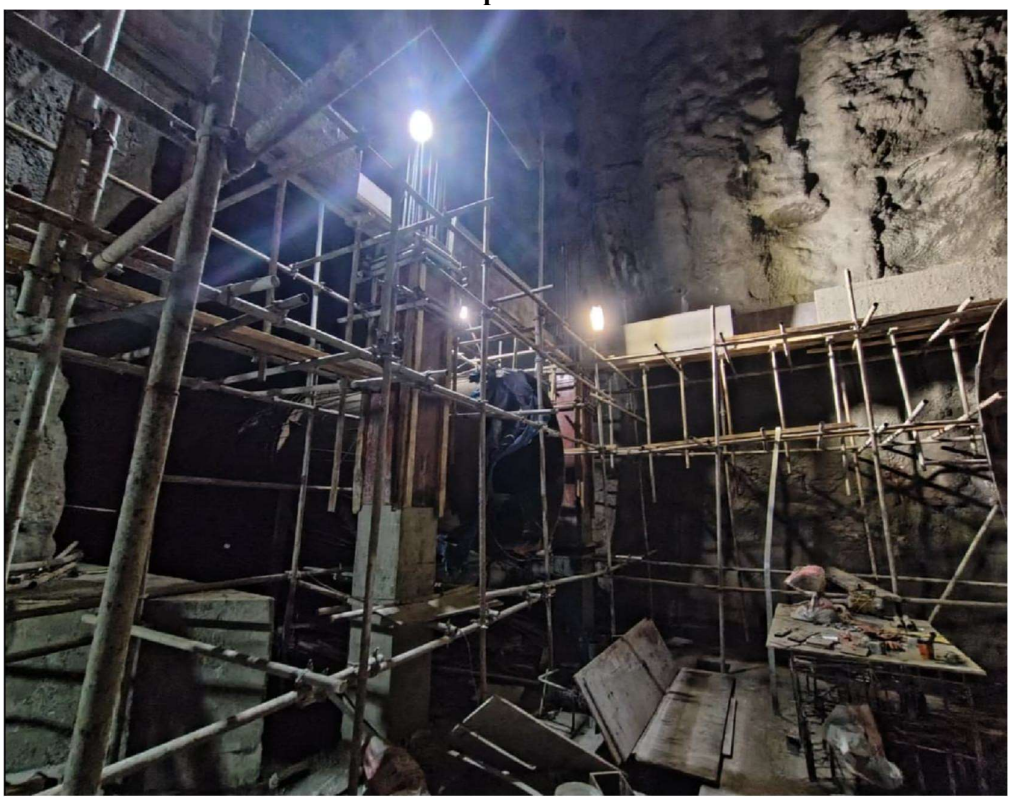
Surface and Underground Final Lining Progress Report on month February 2026

S.N	Description of Work site	Unit	Total HRT Length	Permanent support	Total Length	From 1st Feb	To 28th Feb	This month Progress	Progress in percent	Remaining	Remarks
1	HRT from inlet to Adit 1 (F1)	M	1629.25	Shotcrete	1010	1010	1010	0	100.00	0	completed
				Invert Concrete	1630	1630	1630	0	100.00	0	completed
				Full Concrete (Gantry)	625.7	294.14	384.25	90.11	61.41	241.45	
				Hybrid concrete and shotcrete	35.65	35.65	0.00	0.00	35.65	0.00	completed
				Grouting	1630	0	0	0	0.00	1630	
2	HRT from Adit 1 Junction to U/S (F2)	M	1335.75	Shotcrete	730.013	730.013	730.013	0	100.00	0	completed
				Invert Concrete	1334.25	1177.58	1327.21	149.63	99.47	7.04	completed
				Full Concrete (Gantry)	596	543.035	587.04	44.005	98.50	8.96	completed
				Hybrid	13.702	13.702	13.702	0	100.00	0	completed
				Phulping shaft	15	0	2.8	2.8	18.67	12.2	
				Grouting	1334.25	232.622	232.622	0	17.43	1101.628	
3	HRT from Adit 1 Junction to D/S (F3)	M	1547.15	Shotcrete	730	441.16	441.16	0	60.43	288.84	
				Invert Concrete	1547.15	1537.15	1537.15	0	99.35	10	completed
				Hybrid (Shot+concrete)	70.79	70.79	70.79	0	100.00	0	
				Full Concrete	704	0	173.2	173.2	24.60	530.8	
				Grouting	1547.15	0	0	0	0.00	1547.15	
4	HRT from Adit 2 Junction to U/S (F4)	M	1753.85	Shotcrete	1086.33	697.45	840.45	143	77.37	245.88	
				Invert Concrete	1756.37	1686.98	1686.98	0	96.05	69.39	completed
				Full Concrete (Gantry)	604.144	272.32	349.02	76.7	57.77	255.124	
				Rock trap+ Steel Lining	65.9	0	0	0	0.00	65.9	
				Grouting	1753.85	0	0	0	0.00	1753.85	
5	Total	M	6266	Total invert concrete		6031.71	6181.34	149.63	98.648899	86.43	

Tunnel Works Summary

Upper Pressure Tunnel site:

- Excavation work at Upper Pressure Tunnel: 0+519 m face chainage reached and completed.
- 428 m pipe erection work completed in UPT.
- Concrete infill up to 41-meter section completed.
- Saddle support: Out of 90 number of the saddle 83 number of the saddle has been completed.
- Anchor block (AB01): anchor rod drilling works completed. Consolidation grouting works completed. Concrete works completed up to 1374 m level completed.
- Anchor block (AB02) - Concrete works completed.
  Overall cumulative tunnel work:- 88% Completed.



Valve Chamer Work at Valve House

3.4.4 Powerhouse Site:

- Turbine outlet gate: concrete work completed.
- Turbine (powerhouse): Final (3rd stage) concrete work completed.
- Main inlet valve (M.I.V): 2nd stage concrete (C35) completed.
- Non-shrinkage grouting: All three units (Turbine) completed.
- Control building: Plumbing work completed. Sukri work completed. Plaster work completed. Base concrete work of station transformer is completed. P.C.C work completed between control buildings to retaining structure (transition portion). Tile works continue, kitchen works completed, parquetting works completed, material transportation for granolithic flooring is continues.
- Concrete work on both slab (A & B) completed. Column of 1st lift above slab A completed. Ceiling plaster works completed. Completed, brick work completed. Plaster work completed. Placing of spiral stair case completed.
- Tailrace gate: Completed.
- Tail pool: Concrete work of top of slab is completed.

- Manifold tunnel 1, 2, 3: Concrete work completed.
- Expansion joint between PH and manifold tunnel: Concrete work completed of panel 1, 2 and 3.
- Manifold junction: Placing of anchor rod completed.
- Tailrace: Concrete work of all panels (1 to 13) is completed.
- Tailrace drain: construction of surface drain completed.
- Floodwall: All panel of the flood wall completed.
- Control Building:
- Switchyard: Outer boundary masonry wall completed. Back fill work completed. Compaction completed. Foundation base works completed. All most all concrete work completed. Back fill work just started. Drain work continue.
- Current Transformer (C.T): Base concrete completed. Concrete works completed.
- Cable trench: Cable trench connecting from service bay through retaining wall to switchyard completed.
- Anchor block (AB06): Excavation and P.C.C completed (between vs2 and upt). Pipe erection continues, plum concrete continues. Concrete work on outer side (boundary) (up to 1382.37 m completed) continues. In terms of concrete volume almost 2500 m^3 Plum concrete remaining and 150 m^3 C25 concrete remaining.
- Truss: Placing of truss on top of power house completed. Placing of CGI sheet above truss completed. (Roofing work completed)
- Gutter work completed.
- VS-2: Infill up to Anchor block base is completed.
- Brickwork: Brick work on power house is completed.
- Plaster Work: Inner side of powerhouse completed.
- Cleaning inside the power house completed.
- Surki works in Powerhouse- completed.
- Back fill up to top of transition portion completed.
- Percolated pipe (sub surface drainage system): Completed
- Switchyard protection wall (retaining wall) – panel1, panel2 & panel3- all completed. Masonry wall (boundary wall) completed.
- Gabion wall between bridge and retaining wall completed.
- Boulder Riprap (C35): completed.
- Glass work on powerhouse completed.
- Color work on powerhouse completed.
- Service bay protection retaining wall: Total 3 number of retaining wall. Panel 1, 2& 3 completed.
- Back side of service bay protection retaining wall –Gabion work completed.
- Transformer yard – Concrete work completed.
- Placing of door and window on control room completed.
- AP 1 tower – base preparation completed.
- Boulder shifting work from river is completed.
- Transition portion between control building control building vertical retaining wall cable trench completed.
- Concrete works of Paleo channel retaining wall completed.
- Gabion work near temple for road protection completed.
- Retaining wall U/S of switch yard for river protection, concrete work completed.

Overall cumulative progress of Powerhouse: - 100%

Figure: Powerhouse and control building

Figure Powerhouse and switchyard

3.4.5 Hydro Mechanical work

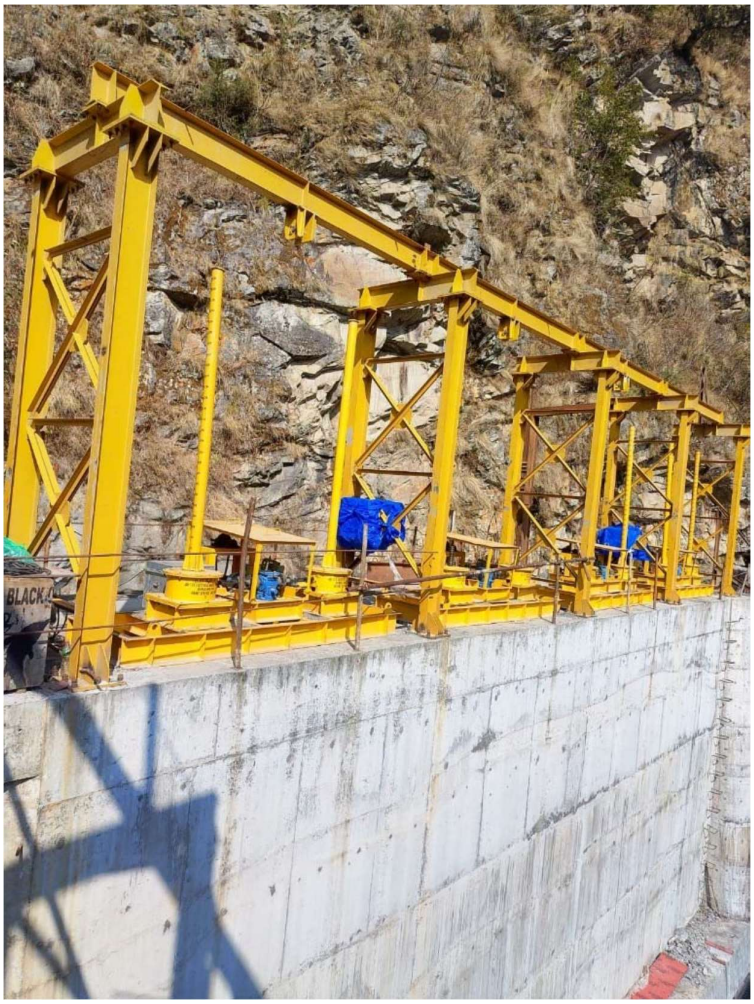
- Pipe erection works at VS-1 and VS-2 completed.
- Surge bell mouth erection completed.
- Sand blasting of 453 pieces completed in total (No Sand blasting in this month).
- 396.088 m of pipe erection completed in the UPT (including 50.00m during this month).
- Hydrostatic pressure testing of the trifurcation, including all branch pipes, reducers, and penstocks, successfully completed.
- Bend-03 at the top of VS-1 erected, along with 2.9 m of pipe upstream of Bend-03.
- Branch pipe erection completed.
- 35.137 m of pipe erected on the inclined section between the T Junction and Bend-02.
- 5 m of pipe erected at VS-2 top anchor block (total pipe erection at VS-2 top now reaches 21.01 m).
- 73 wear and saddle plates erected at UPT (including 10 plates during this month).
- Installation of intake service gate leaf completed.
- 5 m of branch pipe erected in the powerhouse.
- one manhole erected at UPT near the niche and one at LPT is completed.
- Bend 08 Erection and welding completed in LPT.
- 3.8 m pipe erection completed in valve chamber.
- 18.742 m pipe erections completed in LPT and pipe erecrtion work is completed.

Overall Cumulative Progress of Hydromechanical Works: - 91%

Preparation for the installation of the radial gate

Pipe Installation work at UPT

Figure Under Sluice Gate



Hosting Installation of Gate

DPT testing in joints

3.4.6 Electro-mechanical works

- Installation of the power transformer at the sending-end switchyard completed.
- Generators and their accessories delivered to site.
- Initiated installation of control panels and switchgear panels in the control room.
- Installation of embedded bolts for switchyard gantry at the LILO switching station completed.
- All three generating units (stator & rotor) arrived safely and were successfully unloaded at the powerhouse.
- Second-stage concreting and cable trench works at the powerhouse completed.
- Installation of 11 kV switchgear panels, 400 V switchgear panel, and generator transformer protection panels completed.
- Installation of foundation bolts for lightning arresters, current transformers, potential transformers, disconnecting switches, circuit breakers, and bus post insulators completed in the powerhouse switchyard.
- Commenced installation of embedded plates and angles for tray support in the cable trench of the powerhouse switchyard.
- Commenced erection of Unit-3 generator.
- Erection of switchyard structures at Bay-2 completed, along with installation of switchyard equipment including current transformers, circuit breakers, potential transformers, disconnecting switches, and lightning arresters at Bay-1.
- Installation of cable trays at the powerhouse switchyard completed.
- Installation of electrodes for the above-ground earthing system of lightning arresters in the switchyard completed.
- Nozzle dismantling works for Units-1 and 2 completed.
- Main inlet valve (MIV) installation for Units-1 and 2 completed, marking the completion of MIV installation for all three units.
- Generator installation works for Unit-3 ongoing, while turbine casing cleaning for Units-1 and 2 has been completed.
- Installation of station supply transformers has completed.
- Erection of penstock drainage system before main inlet valve has been completed.
- The installation of electrical equipment at the powerhouse switchyards has been completed.
- Commence of installation of unit 2 generator has been completed.
- Installation of angle for cable tray support between control room and powerhouse ongoing.
- All three-generator erection work has been completed.
- Cable tray installation work is in control room and powerhouse switchyard has been completed.
- Nitrogen Injection Fire Fighting System at the powerhouse switchyard has been completed.
- Outdoor Switchgear equipment at Sending end Switchyards Completed.
- Ongoing power cable and control cable laying works at control room and powerhouse switchyards.
- Ongoing installation of nozzle in units 3.
- Cooling unit pipeline works are ongoing.
- Above –ground earthing layout works at powerhouse and powerhouse switchyard have been completed.
- Cable glanding and cable termination works at the powerhouse switchyard are in progress and are near completion.
- Foundation bolt fixing and steel structure installation works at LILLO area are ongoing.
- Below ground earthing layout works are ongoing.

Overall Cumulative Progress of Electromechanical works: - 95%

Generator Erection Works

Control Unit

Turbine and Nozzle Installation Work

Hydraulic Unit

Cooling Unit Pipeline Work

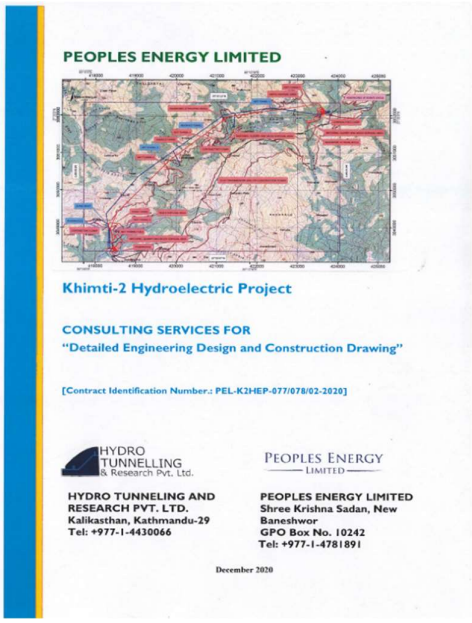
Station Supply Transformer

Powerhouse Switchyard area

3.4.7 Design Consultant's Progress

For the consulting services for detailed engineering design and construction drawing Hydro Tunneling and Research Pvt. Ltd. was awarded the contract on 10th December 2020. Major Activities by the Design Consultant are listed below:

- Total of 121 IFC drawings have been issued till now.
- Overall design and IFC drawings 100% completed



3.4.8 132 kV Transmission Line works

- Foundation works of all towers from the Powerhouse Switchyards to the LILO Switching Station completed.
- Erection of Dead-end towers at LILO Progressing.
- Erection of four number of tower out of seven Towers has been completed.

Overall cumulative progress of transmission line works: - 82%

Figure: AP1 Tower at Powerhouse Switchyards

AP2 Tower at Powerhouse Switchyards

Erection of Towers

3.4.9 Loop in Loop Out (LILO) Receiving End Substation

- Excavation: Excavation work continue at the 3rd Bench.
- Backfilling: Backfill and compaction work at the Control Building area are now 100% complete.
- Plum Retaining Walls: Construction has completed up to Panel-6.
- Masonry Works: Masonry construction for two wall is currently in progress.
- The 7m Retaining Wall is complete, which completes the 1st Bench.
- All structural work for the 4m, 3m, and 2m Retaining Walls has been 100% completed
- Control Room Foundation: PCC (Plain Cement Concrete is completed for control building.
- Reinforcement of Control Building: Steel rebar fabrication and placement are currently underway.
- Concrete Structure: Concrete pouring for permanent structures continues at both the 2nd and 3rd Benches.

Overall cumulative progress of LILO works: - 88%

EM Structure Erection Work at LILO

Masonary Work at LILO

LILO Control Building PCC work