

**STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES  
(PART I)**

NAME OF SCHEME:		Selim H.E Project - ROR, 2x29 MW
<b>GENERAL INFORMATION</b>		
1	State	Meghalaya
2	Location -	Damsite-Between East & West Jaintia Hills District, near Umsalang village (Right Bank)
(a)	Latitude of Dam	25° 21' 48.99 " N
(b)	Longitude of Dam	92° 11' 38.52 " E
<b>General layout /Index map may please be furnished</b>		
3	District	East Jaintia Hills District
4	Nearest G&D site	Damsite
5	Catchment Area near G&D site	170.80 Sq.Km
6	Status of availability of G&D site	Established since May 2006.
7	Basin/River	Myntdu
8	Catchment Area (Sq.km)	170.80 Sq.Km
9	Type of Scheme (ROR/Storage/PSS)	ROR scheme
10	Firm Power (MW)	2.39 MW
11	Annual Energy Benefits (GWh)	315.67MU in 90 % Dependable year
12	Inter State Aspects	Does not arise
13	International Aspects	NIL
14	Defense aspects	No defense installations
15	R & R Aspects	Does not arise
16	Forests area involved	Detail Investigation to be taken up
17	Geological problems anticipated, if any	Sub-surface investigation will be carried out.
18	Accessibility-Nearest Rail head/ Road and distance from the project.	Nearest Rail Head: Guwahati - 193 Km. Nearest Road: 5 Km from Mupyut (PWD Road), West Jaintia Hills District.
19	Upstream scheme, if any -	Nil
20	Downstream scheme, if any. -	Commissioned Leshka-I (3X42 MW), Proposed Leshka-II (3X60 MW). As per the MoEF guidelines, the proposed Suchen HEP, just downstream of Selim HEP, may not be feasible.
<b>II TENTATIVE PROJECT FEATURES</b>		
<b>RESERVOIR</b>		
21	a) FRL	El 1103.50 m
	b) MWL	El 1105.50 m
	c) MDDL	El 1093.50 m
	d) Gross storage at FRL	1.51 M Cum
	e) Capacity at MDDL	0.55 M Cum
	c) Live storage	0.957 M Cum
<b>Dam</b>		
22	a) Type	Concrete gravity
	b) Top elevation of dam -	El 1105.50 m
	c) Height of dam from bed upto FRL	33.50 m
	d) Height of dam from deepest foundation level	35.50 m
	e) Deepest foundation level	El 1070 m
<b>INTAKE</b>		
23	a) Type	Semi Circular with trash Rack
	b) Invert Level	El 1089.50 m
<b>Head Race Tunnel</b>		
24	a) Type	Modified Horse Shoe
	b) Length	4784m
	c) Diameter	3.00 m Φ
	d) Design Discharge	18.15 Cumecs
	e)Max. Design Discharge	19.96 Cumecs
<b>Pressure Shaft</b>		
25	a) Shape	Circular
	b) Length	1233.00m
	c)Internal Diameter	2.00m

<b>SURGE SHAFT</b>		
26	a) Type	Restricted Orifice
	b) Diameter	15.00 m
	c) Height upto Ground Level	53.00 m
<b>POWER HOUSE</b>		
27	a) Type	Surface
	b) Size (L X B)	
	i) Machine Hall	40 m x 14 m
	ii) Service/Erection Bay	13 m x 14 m
	iii) Auxiliary Bay	27 m x 14 m
	c) Installed Capacity	2 X 29MW
d) NTWL	713.30 m	
<b>Tail Race Tunnel</b>		
28	a) Length	50 m
	b) Height	2.50 m
	c) Width	5.70 m
<b>TURBINE</b>		
29	a) Type of Turbine	FRANCIS
	b) Gross Head	390.20 m
	c) Rated net Head	369.13 m
	d) Maximum Design Head	381.40 m
	e) Minimum Design Head	344.60 m

Please give brief details about the HE Scheme and enclose a layout map.

**Brief details on Selim H.E. Project:**

The Selim Hydro Electric Project envisages construction of concrete gravity dam of about 33.50m high from the deepest river bed level across river Myntdu to provide a live storage of 0.957 M Cum with FRL at El 1103.50 m and MDDL at El 1093.50 m, 4.784 Km long and 3.00 m dia circular Head Race Tunnel terminating in a 53.00 m high 15.00 m dia surge shaft, 2.30 m dia orifice, a surface power house having an installation of 2(two) nos of Francis type generating units of 29 MW each operating under a rated head of 369.13 m.

It is the uppermost hydro electric project in a series of the proposed hydel projects on the Myntdu river. It envisages utilization of the water of the river Myntdu for power generation on a Run of the River (ROR) type development, harnessing a gross head of about 387.50 m. The project with a proposed installation of 58MW (2X29MW) will provide Annual Energy Benefit of 194.29 MU in a 90% dependable year.

  
(Signature)

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Telephone No.....Code No


**STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES  
(PART- II)**

Quarter Ending December, 2023

NAME OF SCHEME SURVEY & INVESTIGATION		Selim HE Project (2x29 MW)	
1	Date of commencement of S&I	2006-2007(Hydrological observation)	
2	Date of Sanction	NEC/IRGN/MEG/2K/3/821 Dt.25.03.2008	
3	Likely date of completion of S& I	2027	
4	Likely date of completion of DPR	2027	
5	Estimated cost of S&I/DPR and Phasing of Expenditure	Rs. 450.00 Lakh	
	Revised Estimate Cost	Rs. 792.00 Lakh	
6	Agency of Investigation (in case of Pvt.Agency, Name, Designation, Complete Address, telephone no. & Fax No. is to be indicated).	Meghalaya Power Generation Corporation Limited.	
7	Details of Progress @	Quantity Done	Quantity to be done
		55%	45%
a	Tracer Path & Approaches	50%	
b	Roads	20%	
c	Construction of Temp. Building	Completed	
d	Purchase of Special T &P	To be taken up	
e	Topographic Survey/Investigation	Completed	
f	Surface & Sub-surface Investigation	55%	
g	Const. Material (CA&FA)	50%	
h	Hydrological observations	Data collection since June 2006	
i	Meteorological	Data collected since June 2006	
j	Environmental Survey	10%	
k	Programme of works during the year	<p>Observation, compilation and computation of hydrometeorological data of the project are persistent activities.</p> <p><b>I. January - March, 2023</b> Preparing estimate for Repairing of Temporary Barrack and Calibration of rain gauge instruments at different rainfall stations.</p> <p><b>II. April - June, 2023</b> Monitoring the Repairing of the Temporary Barrack, Monitoring the Exploratory Drilling and Water Percolation Test and logging of Cores sample of BH – 6 (Along the WCS), BH – 8 (Surge Shaft), BH – 10, BH – 11 and BH - 12 (Right Bank of Dam Axis). Monitoring the Discharge and Rainfall data collection.</p> <p><b>III. July - September, 2023</b> Monitoring the Exploratory Drilling and Logging of cores sample of BH – 9 (Centre of Power House), BH – 13, 14, 15, 16, 17 (Corner and Back Slope of Power House). Collecting silt sample for laboratory test, collecting of water samples for laboratory test from G&amp;D site, Monitoring Discharge and Rainfall observations.</p> <p><b>IV. October - December, 2023</b> Monitoring the Exploratory Drilling and Logging of cores sample of BH – 4 (Intake), BH – 5 (Bucket Area), Construction of Kutcha road to Dam axis, Exploratory Drift on both the left and right bank of Dam axis, in - situ test, logging of cores sample along the WCS and Power House, Dam module studies by CWPRS,Pune, Reservoir Seismic sensitivity test, Seismic refraction survey, Electro-resistivity test at Power House and Switchyard,Preparation of general layout of the project</p>	
l	Overall progress of works	55%	
m	Geological and foundation Investigation	In progress	
	@ In case it is not possible to give tentative quantity it should be given as percentage Financial Progress.		
8	Estimated cost of Survey & Investigation with price level year		
9	Capital Expenditure incurred upto December 2023	Rs 337.72 Lakh	
10	Budget estimate		
11	Revised Estimate		

BOTTLE NECKS, IF ANY

- 1.Limited working days (approx) 6 months in a year.
- 2.Harsh topography and remoteness of the project area
- 3.Irregular availability of the official expert of the concerned Government agencies/department who are to carry out the study /information of the respective aspects of the Detailed Project Report(DPR) of the project.
- 4.Land holding system-The land of the project areas are privately owned and issuing of NOC for S&I of the project takes a considerable amount of time.
- 5.Scarcity of local firms/contractors capable of carrying out the S&I works such as topographical survey and exploratory drilling of the project.
- 6.The official formalities such as trading license and labour licenses etc. are some of the reasons where the agencies/firms from outside the state are reluctant to take up the S&I works in Meghalaya.
- 7.Covid -19 may be attributed to the matter.
- 8.Compliances to the observation of the concerned Directorates/Divisions/organisations,etc. under CEA by the expert agencies/departments are received after much delay.



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