

STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES

(PART I)

NAME OF SCHEME:		Selim H.E. Project - ROR, 2x29 MW
GENERAL INFORMATION		
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
General layout /Index map may please be furnished		
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)	3.17 MW
11	Annual Energy Benefits (GWh)	194.29 MU 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/	Nearest Rail Head: Guwahati - 193 Km.
	Road and distance from the project.	Nearest Road: 5 Km from Muput (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.
II TENTATIVE PROJECT FEATURES		
21	RESERVOIR	El 1103.50 m
	a) FRL	El 1105.50 m
	b) MWL	El 1093.50 m
	c) MDDL	1.51 M Cum
	d) Gross storage at FRL	0.55 M Cum
	e) Capacity at MDDL	0.957 M Cum
	c) Live storage	
22	Dam	Concrete gravity
	a) Type	El 1105.50 m
	b) Top elevation of dam -	33.50 m
	c) Height of dam from bed upto FRL	35.50 m
	d) Height of dam from deepest foundation level	El 1070 m
	e) Deepest foundation level	
23	INTAKE	Semi Circular with trash Rack
	a) Type	El 1089.50 m
	b) Invert Level	
24	Head Race Tunnel	Modified Horse Shoe
	a) Type	4784m
	b) Length	3.00 m Φ
	c) Diameter	21.74 Cumecs
	d) Design Discharge	19.96 Cumecs
	e)Max. Design Discharge	
25	Pressure Shaft	Circular
	a) Shape	1233.00m
	b) Length	2.00m
	c)Internal Diameter	

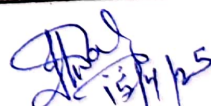
26	SURGE SHAFT	Restricted Orifice
	a) Type	15.00 m
	b) Diameter	53.00 m
	c) Height upto Ground Level	
27	POWER HOUSE	Surface
	a) Type	
	b) Size (L X B)	40 m x 14 m
	i) Machine Hall	13 m x 14 m
	ii) Service/Erection Bay	27 m x 14 m
	iii) Auxiliary Bay	2 X 29MW
28	c) Installed Capacity	713.30 m
	d) NTWL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

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 390.20 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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Executive Engineer (Civil)

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Investigation Division - II

Me. P.G.C.L., Umiam

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

Quarter Ending March, 2025

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
		71%	29%
a	Tracer Path & Approaches	50%	
b	Roads	80%	
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	80%	
g	Const. Material (CA&FA)	100%	
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>I. January - March, 2025 Preparing Contractor's bills, preparing estimate for geophysical survey at power house, and other estimates related to the S & I works.</p> <p>II. April - June, 2025 Monitoring the Exploratory Drilling and Water Percolation Test and logging of Cores sample of BH – 7 (Along the WCS), Monitoring the Discharge and Rainfall data collection and collection of water sample for laboratory test (Water analysis).</p> <p>III. July - September, 2025 Monitoring the Exploratory Drilling and Logging of cores sample of BH – 8 (Surge Shaft), collecting of water samples for laboratory test (Water analysis), Monitoring Discharge and Rainfall observations.</p> <p>IV. October - December, 2025 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. Monitoring the geophysical survey at Power House and monitoring the site visit for conducting investigation for estimation of Shear Wave Velocity (Vs 30).</p>	
l	Overall progress of works	71%	
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 March 2025	Rs 454.80 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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