

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

NAME OF SCHEME:		Selim H.E Project - ROR, 2x40 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)	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.
II TENTATIVE PROJECT FEATURES		
RESERVOIR		
21	a) FRL	El 1103.50 m
	b) MWL	El 1103.50 m
	c) MDDL	El 1093.50 m
	d) Gross storage at FRL	1.505 M Cum
	e) Capacity at MDDL	0.548 M Cum
	c) Live storage	0.957 M Cum
Dam		
22	a) Type	Concrete gravity
	b) Top elevation of dam -	El 1105.50 m
	c) Height of dam above the river bed level	34.50 m
	d) Deepest foundation level	El 1069 m
INTAKE		
23	a) Type	Semi Circular with trash Rack
	b) Invert Level	El 1089.50 m
Head Race Tunnel		
24	a) Type	Modified Horse Shoe
	b) Length	4786m
	c) Diameter	3.40 m Φ
	d) Design Discharge	28 Cumecs
Pressure Shaft		
25	a) Shape	Circular
	b) Length	1233.00m
	c) Internal Diameter	2.00m

26	SURGE SHAFT	
	a) Type	Restricted Orifice
	b) Diameter	18.00 m
	c) Top elevation	1118.96 m
	d) Bottom elevation	1075.00 m
	e) Height	43.96 m
	f) Diameter of orifice	2.30 m
	g) Gate	1 No (4.00 m x 5.00 m)
27	POWER HOUSE	
	a) Type	Surface
	b) Size (LXB)	
	i) Machine Hall	30 m x 15 m
	ii) Service/Erection Bay	11 m x 15 m
	iii) Auxiliary Bay	30 m x 6 m
	iv) Maximum height from turbine floor	10.00 m
	c) Installed Capacity	2X 40 MW
d) NTWL	724.37 m	
28	TURBINE	
	a) Type of Turbine	PELTON
	b) Maximum Gross Head	387.50 m
	c) Minimum Gross Head	377.50 m
	d) Rated net Head	345.417 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 34.50m 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, 4.786 Km long and 3.40 m dia circular Head Race Tunnel terminating in a 43.96 m high 18.00 m dia surge shaft, 2.30 m dia orifice, a surface power house having an installation of 2(two) nos of Pelton type generating units of 40 MW each operating under a rated head of 345.417 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 80 MW (2X40MW) will provide Annual Energy Benefit of 315.67MU in a 90% dependable year.

(Signature)

Name: Shri. Q. Marbaniang

Designation: Executive Engineer (C)

Telephone No.....Code No

STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES

(PART- II)

Quarter Ending September, 2022

NAME OF SCHEME SURVEY & INVESTIGATION		Selim HE Project (2x40 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	2023	
4	Likely date of completion of DPR	2023	
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>I. January - March, 2022 Carrying out/monitoring the exploratory drilling of HRT, observation of Hydrometeorological data ,Road Alignment to different project Components, Preparing Estimates of newly proposed Bore Holes Suggested by the GSI at the Power House Area (BH-13, BH-14, BH -15, BH - 16 and Bh -17) of the Proposed Power house.</p> <p>II. April - June, 2022 Monitoring the Exploratory Drilling and Logging of cores sample of BH – 12 at the Right Bank of Dam Axis, Preparing Estimate for Construction of approach kutcha road to Dam Axis from hill top. Monitoring the Discharge and Rainfall data collection.</p> <p>III. July - September, 2022 Monitoring the Exploratory Drilling and Logging of cores sample of BH – 10 and BH – 11 at the Right Bank of Dam Axis, Collecting silt sample for laboratory test, collecting of water samples for laboratory test from G&D site, Monitoring Discharge and Rainfall observations.</p> <p>IV. October - December, 2022 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 September 2022	Rs 323.87 Lakh	
10	Budget estimate		
11	Revised Estimate		
<u>BOTTLE NECKS, IF ANY</u>			
<p>Limited working days (approx. 6(six) months in a year), Difficult Terrain and remoteness of the project area, Shortage of Manpower, irregular allocation/release of fund, Inaccuracy of toposheet covering the project which accounts to revision the planning of the project.</p>			

(Signature)

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