

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/	Nearest Rail Head: Guwahati - 193 Km.
	Road and distance from the project.	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	EI 1103.50 m
	b) MWL	EI 1103.50 m
	c) MDDL	EI 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 -	EI 1105.50 m
	c) Height of dam above the river bed level	34.50 m
	d) Deepest foundation level	EI 1069 m
INTAKE		
23	a) Type	Semi Circular with trash Rack
	b) Invert Level	EI 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
<p><u>Please give brief details about the HE Scheme and enclose a layout map.</u></p> <p><u>Brief details on Selim H.E. Project:</u></p> <p>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.</p> <p>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.</p>		

(Signature)

Name: Shri. Q. Marbaniang

Designation: Executive Engineer (C)

Telephone No.....Code No

STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES

(PART- II)

Quarter Ending March, 2023

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	2024	
4	Likely date of completion of DPR	2024	
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, 2023 Preparing estimate for Repairing of Temporary Barrack and Calibration of rain gauge instruments at different rainfall stations.</p> <p>II. April - June, 2023 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>III. July - September, 2023 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&D site, Monitoring Discharge and Rainfall observations.</p> <p>IV. October - December, 2023 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 March 2023	Rs 326.48 Lakh	
10	Budget estimate		
11	Revised Estimate		

BOTTLE NECKS, IF ANY

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.
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.
Clearance/approval of the respective DPR aspects by the concerned Government agencies/department take a considerable amount of time.
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.

(Signature)

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