

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

NAME OF SCHEME:		Selim HE Project - ROR, 2x48 MW
GENERAL INFORMATION		
1	State	Meghalaya
2	Location -	Damsite-Between East & West Jaintia Hills District, near Umsalang village
(a)	Latitude of Dam	25° 21' 48.41 " N
(b)	Longitude of Dam	92° 11' 38.30 " E
General layout /Index map may please be furnished		
3	District	East & West 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 (3X70 MW). As per the MoEF guidelines, the proposed Suchen HEP, just downstream of Selim HEP, may not be feasible.
II 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	4688m
	c) Diameter	3.50 m Φ
	d) Design Discharge	30.794 Cumecs
HPT		
25	a) Diameter	2.80 m
	b) Length	90.00 m
SURGE SHAFT		
26	a) Type	Restricted Orifice
	b) Diameter	15 m
	c) Height upto G.L	53 m

27	PENSTOCK	
	a) Diameter	2.80 m
	b) Length	1457 m
28	POWER HOUSE	
	a) Type	Surface
	b) Size (LXB)	
	i) Machine Hall	42 m x 13 m
	ii) Service/Erection Bay	16m x 13 m
	iii) Auxiliary Bay	22 m x 13 m
	c) Installed Capacity	2X48 MW
	d) NTWL	716 m
29	TAIL RACE CHANNEL	
	b) Length	50.00 m
	c) Height	2.50 m
	d) Width	5.70 m
30	TURBINE	
	a) Type of Turbine	FRANCIS
	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 proposed damsite of Selim H.E. Project is located between East and West Jaintia Hills District of Meghalaya. It is the uppermost hydro electric project in a series of 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 96 MW (2X48MW) .

The diversion site is located at Latitude 25° 21' 48.41 " N, and Longitude 92° 11' 38.30 " E. The damsite is approachable from Mupyut village on Shillong – Dawki highway at a distance of 20 kms from Jowai and 85 Km from Shillong. The nearest rail head and airport are located at Guwahati and Umroi respectively.

The Selim HE project envisages construction of 34.50 m high concrete gravity dam from the deepest foundation 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, 4.688 Km long and 3.50 m dia circular Head Race Tunnel terminating in a 53 m high 15.00 m dia surge shaft, 1457.00 m long, 2.80 m dia penstock, a surface power house having an installation of 2(two) nos of Francis type generating units of 48 MW each operating under a rated head of 345.417 m.

Signature)

Name: Er. Q. Marbaniang

Designation: Executive Engineer (C)

Telephone No.....Code No

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

Quarter Ending March, 2019

	NAME OF SCHEME SURVEY & INVESTIGATION	Selim HE Project 2x48 (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	2019	
4	Likely date of completion of DPR	2020	
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
		50%	40%
a	Tracer Path & Approaches	50%	
b	Roads	50%	
c	Construction of Temp. Building	Completed	
d	Purchase of Special T &P	To be taken up	
e	Topographic Survey/Investigation	In progress	
f	Const. Material (CA&FA)	50%	
g	Hydrological observations	Data collection since June 2006	
h	Meteorological	Data collected since June 2006	
i	Environmental Survey	5%	
j	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, 2019 Preparation of revised budget for the year 2018-19 and main budget for the year 2019-20.Detail contour survey of WCS and power house,checking the raingauge instruments,calculation and monitoring of Hydrometeorological data,Geological mapping of WCS &Power House , Drilling and making footpath at damsite.</p> <p>II. April - June, 2019 Calculation and monitoring of Hydrometeorological data ,making footpath to Power House, repairing of the existing suspension footbridge downstream of the proposed Dam axis,identification of Quarry, collecting Water &Silt sample and drilling at damsite.</p> <p>III. July - September, 2019 Calculation and monitoring of Hydrometeorological data ,collecting of water &silt sample,logging of cores sample of dam area,physical and chemical test of fine & coarse aggregates ,dam break studies survey and observation of HFL</p> <p>IV. October - December, 2019 Land acquisition survey of the submergence area, drilling along WCS,Surge Shaft and power house,Logging of cores sample,Reservior Seismic-Sensitivity Test and Site specific design seismic parameter study.</p>	
k	Overall progress of works	50%	
1	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 from Jan to March 2019	Rs 230.71 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, account to revision of project components result in delay of S&I works.			

(Signature)

Name:Shri. Q. Marbaniang
Designation:Executive Engineer (C)
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