

STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES		
(PART I)		
NAME OF SCHEME		Mawblei HE Project-Storage, 2x37.5 (MW)
<b>GENERAL INFORMATION</b>		
1	State	Meghalaya
2	Location -	Near village Nongmawlong
a	Latitude of Dam	25° 31' 36.96" N,
b	Longitude of Dam	91° 02' 14.40" E,
	General layout /Index map may please be furnished	
3	District	West Khasi Hills District
4	Nearest G&D site	Near the dam site axis
5	Catchment Area near G&D site	218.00 Sq.Km
6	Status of availability of G&D site	Set up since 2006, 1Km upstream of the Dam site.
7	Basin/River	Wahblei
8	Catchment Area (Sq.km)	218.00 Sq.Km
9	Type of Scheme (ROR/Storage/PSS)	Storage scheme
10	Firm Power (MW)	15.75 MW (Revised)
11	Annual Energy Benefits (GWh)	i) 277.08 Mu in 90% dependable year ii) 322.20 Mu in 50% 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 study to be taken up
17	Geological problems anticipated, if any	Sub-surface investigation is to be carried out.
18	Accessibility-Nearest Rail head/ Road and distance from the project.	Nearest Rail Head: Guwahati, (103 Km from Shillong). Nearest Road: 10 Km from Mawkhap, West Khasi Hills District on NH 44 E (Shillong- Tura SH)
19	Upstream scheme, if any -	NIL
20	Downstream scheme, if any. -	Kynshi Stage-II HEP
<b>II PROJECT FEATURES</b>		
21	<b>RESERVOIR</b>	
	a) FRL	762.00 m
	b) MWL	762.00 m
	c) MDDL	750.80 m
	d) Gross storage at FRL	34.23 Mcm
	e) Live storage	20.61 Mcm
22	<b>Type of Diversion Structure/Tunnel</b>	
	a) Number	1 No.
	b) Size	2.40 m Φ
	c) Diversion	71.51 cumecs
	d) MDDL	750.80 m
	e) Live /Storage	20.61 M Cum
23	<b>Dam</b>	
	a) Type	Concrete
	b) Top elevation of dam -	EL. 764.00 m
	c) Height of dam above the river bed level	36.37 m
	d) Length of dam at top	250.14 m
	e) River bed level -	El. 727.63 m
24	<b>INTAKE</b>	
	a) Invert Level	744.00 m
	b) Number	1 (one)

25	Head Race Tunnel	
	a) Type	Horse Shoe
	b) Length	1.77 Km
	c) Diameter	3.00 m $\Phi$
26	SURGE SHAFT	
	a) Type	Orifice type
	b) Diameter	2.50 m dia
	c) Height upto G.L	108.65 m
27	PRESSURE SHAFT	
	a) Numbers	1 (Bifurcated into 2 of 1.6 m $\Phi$ )
	a) Diameter	2.25 m $\Phi$
	b) Length	602.76 m
28	POWER HOUSE	
	a) Type	Underground
	b) Power house cavern size (main)	84 m x 13 m x 44 m
	c) Type of turbine	Pelton turbine
	d) C.L of turbine	El 379.00 m
	e) Rated Head	367.34 m
	f) Installed Capacity	2X37.5 MW
	g) Transformer Cavern	50 m x 14 m x 18 m
	h) Length Main Access Tunnel	2.76 km
29	Tail Race	
	a) Type	Horse shoe
	b) Length (m)	4.71 Km
	c) Size	4.00 m $\Phi$
	d) TWL (m)	372.00 m
Please give brief details about the HE Scheme and enclose a layout map.		
Brief details on Mawblei H.E.Project:		
<p>Mawblei H.E.Project, proposed to be located in Mawshynrut C &amp; R D Block, West Khasi Hills District of Meghalaya, is a storage type development which envisages construction of a concrete gravity dam of about El. 36.37m high on river WahBlei, a tributary of river Kynshi, where the river bed is about El. 727.63m to provide a live storage of 26.61 MCM between the FRL of 762.00m and the MDDL of 750.80 M, water from the reservoir are proposed to be diverted to an underground power house through a 1.77 M long modified horse shoe shaped low pressure tunnel of 3.0 M dia. and a 0.6 Km long pressure shaft of 2.25 m dia. bifurcating into 1.6 m dia. for power generation. The power house would have an installation of 2 units of 37.5 MW each operating under weighted average gross head of 385.3 m (Net Head=373.37 m). The project is proposed to provide annual design energy generation of 277.08MU in a 90% dependable year. The Detailed Topographical Survey and Geological Mapping of the project for Alternative-I (An underground powerhouse with pressure shaft) have been carried out and based on the features of this alternative the Power Potential Study have also been prepared wherein the install capacity is about 75 MW whereas the detailed studies for Alt-II (Surface powerhouse with pressure shaft) and Alt-III (Surface powerhouse with surface penstock) are in progress.</p>		

(Signature)

Name: Shri. Q. Marbaniang

Designation: Executive Engineer (C)

Telephone No.....Code No

Fax.No.....Code No.

STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES						
(PART- II)						
Quarter Ending September, 2018						
NAME OF SCHEME SURVEY & INVESTIGATION		Mawblei HE Project 2x37.5 (MW)				
1	Date of commencement of S&I	2006-2007(Hydrological observation)				
2	Date of Sanction	NEC/IRGN/MEG/2K/5/408 Dt.23.01.2009				
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. 472.00 Lakh				
	Revised Estimate Cost	Rs. 892.00 Lakh				
6	Agency of Investigation (in case of Pvt.Agency, Name, Designation, Complete Address, telephone no. & Fax No. is to be indicated).	Meghalaya Power Generatin Corporation Limited.				
7	Details of Progress @	<table border="1"> <thead> <tr> <th>Quantity Done</th> <th>Quantity to be done</th> </tr> </thead> <tbody> <tr> <td>75%</td> <td>25%</td> </tr> </tbody> </table>	Quantity Done	Quantity to be done	75%	25%
Quantity Done	Quantity to be done					
75%	25%					
a	Tracer Path & Approaches	Trace Path completed				
b	Roads	In Progress				
c	Construction of Temp. Building	Completed				
d	Purchase of Special T &P	To be taken up				
e	Topographic Survey/Investigation	100%				
f	Const. Material (Survey/Testing)	In progress				
g	Hydrological observations	Data collection since June 2006				
h	Meteorological	Data collected since June 2006				
i	Environmental Survey	In Progress				
j	Programme of works during the year	<p>Observation, Compilation and computation of hydrometeorological data of the project are persistent activities.</p> <p><b>Jan to April:-</b> Taking cross section of discharge, Installation of wind vane, pan evaporimeter and recording rain guage, checking of non recording and recording rain guage instruments at every stations, Collection the construction material for laboratory test, Surveying and fixing new alignment of proposed surface power house, preparation of estimates and drawings.</p> <p><b>May to December:-</b> Collection silt sample, preparing estimates, Physical and chemical test of fine aggregate and course aggregate, Geological mapping along WCS and power house, preparation of estimates for drilling, cross check the level from discharge site to damsite and up to power house and maintaining the pillar of every permanent benchmark of the Project, Making drift on both right and Left bank of the dam, drilling along WCS and power house, setting up bench pillars along the periphery of reservoir,Site Specific Design Seismic parameters study.</p>				
k	Overall progress of works	75%				
l	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, 2018	Rs. 206.04 Lakh				
10	Capital Expenditure incurred upto June, 2018	Rs. 206.76 Lakh				
11	Capital Expenditure incurred upto September, 2018	Rs. 206.79 Lakh				
12	Budget estimate (Proposed)					
13	Revised Estimate					
14	Budget Estimate					
BOTTLE NECKS, IF ANY						
<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 account to revision of project components result in delay of S&amp;I works.</p>						

(Signature)  
 Name:Er. Q. Marbaniang  
 Designation:Executive Engineer (C)  
 Telephone No.....Code No



|

|