

| STATUS OF SURVEY & INVESTIGATION OF HE SCHEMES | | |
|---|---|--|
| (PART I) | | |
| NAME OF SCHEME Selim HE Project /Storage, 2x48 (MW) | | |
| GENERAL INFORMATION | | |
| 1 | State | Meghalaya |
| 2 | Location - | Damsite-Between East & West Jaintia Hills District, near Unsalang village |
| a | Latitude of Dam | 25° 21' 41" N, |
| b | Longitude of Dam | 92° 11' 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) | Power Potential Studies under process |
| 11 | Annual Energy Benefits (GWh) | |
| 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 is to 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. - | Proposed Suchen (65 MW), Commissioned Leshka-I (3X42 MW), Proposed Leshka-II (2X70 MW) |
| II PROJECT FEATURES | | |
| 21 | RESERVOIR | |
| | a) FRL | 1103.50 m |
| | b) MWL | 1109.50 m |
| | c) MDDL | 1093.50 m |
| | d) Gross storage at FRL | 1.505 Mcm |
| | e) Capacity at MDDL | 0.548 Mcm |
| | c) Live storage | 0.957 Cum |
| 22 | Dam | |
| | a) Type | Concrete gravity |
| | b) Top elevation of dam - | 1105.50 m |
| | c) Height of dam above the river bed level | 34.5 m |
| | d) Deepest foundation level | 1069 m |
| 22 | INTAKE | |
| | a) Type | Semi Circular eith atrash Rack |
| | b) Invert Level | 1089.50 m |
| 23 | Head Race Tunnel | |
| | a) Type | Modified Horse Shoe |
| | b) Length | 4688m |
| | c) Diameter | 3.5 m Φ |
| | d) Design Discharge | 30.794 Cumecs |

| | | |
|---|--------------------------|--------------------|
| 24 | HPT | |
| | a) Diameter | 2.8 m |
| | b) Length | 90.0 m |
| 25 | SURGE SHAFT | |
| | a) Type | Restricted Orifice |
| | b) Diameter | 15 m |
| | c) Height upto G.L | 53 m |
| 26 | PENSTOCK | |
| | a) Diameter | 2.8 m |
| | b) Length | 1457 m |
| 27 | 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 |
| 28 | TAIL RACE CHANNEL | |
| | b) Length | 50.00 m |
| | c) Height | 2.5 m |
| | d) Width | 5.7 m |
| 29 | 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: | | |
| <p>The proposed Selim H.E. Project Dam is locate between East and West Jaintia Hills District of Meghalaya 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 355.50 m. The project with a proposed installation of 96 MW (2X48MW) .</p> <p>The diversion site is located at Latitude 25° 21' 41" N, and Longitude 92° 11' 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.</p> <p>The Selim HE project envisages construction of 34.5 m high concrete gravity dam from the deepest foundation level across river Myntdu to provide a live storage of 0.957 mcm with FRL at 1103.50 m and MDDL at 1093.50 m, 4.688 Km long and 3.5 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 PELTON type generating units of 48 MW each operating under a rated head of 345.4173 m.</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 June, 2018 | | | |
| 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. 472.00 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 Generatin Corporation Limited. | |
| 7 | Details of Progress @ | Quantity Done | Quantity to be done |
| | | 50% | 40% |
| a | Tracer Path & Approaches | 50% | |
| b | Roads | 30% | |
| c | Construction of Temp. Building | Completed | |
| d | Purchase of Special T &P | To be taken up | |
| e | Topographic Survey/Investigation | 100% | |
| 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, 2018 Preparing drawing (L-section) for the differents alternstive alignment, checking of rainguage instruments at different rainfall stations, Inspection for lacion of newly proposed alternative alignment, carrying out level from old power house to newly proposed power house location of alternatie II & III for observing the height difference, identification of Quarry site for coarse aggregate, estimate for repairing of site camp at G&D site, Construction of guage pillar and taking cross section at discharge site.</p> <p>II. April - June, 2018 Collection of aggregate samples and sample-2 for laboratory test from G&D site, making tracepath/footpath to the new proposed power house location (Alt-II), Jungle clearance along the road alignment surey to different project components, estimate for carrying out detailed contour survey and fixing alignment for Alternative-II, Detailed contour survey and fixing the new alignment including setting up of Bench Mark pillars along the alignment and Geological mapping (WCS, Surge Shaft and Power House) Alt-II, Physical and Chemical test of Fine agg and Coarse aggs.</p> <p>III. July - September, 2018 Collecting silt sample, collecting and send to laboratory test of water sample-3 from G&D site.</p> <p>IV. October - December, 2018 Observing HFL at Damsite and Power House, making drift on both right and left bank of the dam, Drilling along Dam area, WCS and Power House, Land aquisition survey of the submergence area, preparation of general layout of the project.</p> | |
| k | | Overall progress of works | 50% |
| 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 December 2017 | Rs. 218.60 Lakh |
| 10 | Capital Expenditure incurred upto March 2018 | Rs. 221.80 Lakh |
| 11 | Capital Expenditure incurred upto June 2018 | Rs. 222.69 Lakh |
| 12 | Budget estimate | |
| 13 | 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:Er. Q. Marbaniang

Designation:Executive Engineer (C)

Telephone No.....Code No

|

