

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

NAME OF SCHEME      Selim HE Project /Storage, 2x40 (MW)

**GENERAL INFORMATION**

- |                     |   |
|---------------------|---|
| 1. State            | Meghalaya   |
| 2. Location         | Dam site – Between East & West Jaintia Hills District, near Umsalang Village. |
| 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 & West Jaintia Hills District  |
| 4. Nearest G&D site  | Dam site.   |
| 5. Catchment Area near G&D site  | 170.802 Sq.Km   |
| 6. Status of availability of G&D site                                      | Established since May 2006.   |
| 7. Basin/River   | Myntdu  |
| 8. Catchment Area (Sq.km)  | 170.802 Sq.Km   |
| 9. Type of Scheme (ROR/Storage/PSS)  | ROR Scheme  |
| 10. Firm Power (MW)  | 29.30 MW  |
| 11. Annual Energy Benefits (GWh)   | 373.52 Gwh in 90% dependable year   |
| 12. Inter State Aspects  | Does not arise  |
| 13. International Aspects  | -do-  |
| 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                                | -do-  |
| 18. Accessibility-Nearest Rail head/<br>Road and distance from the project | Rail head: Guwahati-193 Km, Road - 5 Km from Mupyut village (PWD Road), West Jaintia Hills. |
| 19. Upstream scheme, if any -  | Nil   |
| 20. Downstream scheme, if any. -   | Proposed Suchen (65 MW), Leshka-I (3x42 MW) (commissioned), proposed Leshka-II (2x70 MW)    |

**II PROJECT FEATURES**

- |     |   |                     |
|-----|---|---------------------|
| 21  | Type of Diversion Structure/Tunnel      |                     |
|     | a) Number -                             | 1 no                |
|     | a) Size -                               | 4.50 m Φ            |
|     | b) Length –                             | 500 m               |
|     | c) Diversion discharge –                | 53.3 cumecs         |
|     | e) FRL -                                | 1103.50 metres      |
|     | f) MDDL -                               | 1093.50 metres      |
|     | g) Live storage-                        | 1.00 M Cum          |
| 22. | Dam                                     |                     |
|     | a) Type -                               | Concrete gravity    |
|     | b) Height of dam -                      | 34.50 m             |
|     | c) Top elevation of dam-                | 1105.50 m           |
|     | d) Deepest foundation level –           | 1069.00 m           |
|     | e) Length of dam at top-                | 187.80 m            |
|     | f) Deepest river bed level at dam site- | 1071.00 m           |
| 23  | Water conductor system                  |                     |
|     | a) Type -                               | Modified Horse Shoe |
|     | b) Length -                             | 4.525 Km            |

c) Diameter - 3.10 m  $\Phi$

24. Power House

a) Type - Surface  
b) No. of units- 2 units (2X40 MW)  
c) Net Head (m) – 334.53 m

25. Tail Race Water conductor System

a) Type - Open channel  
b) Length (m) - 100 m  
c) Size - 12.50 m width X 1.5m FSD  
d) TWL (m) - 748 m

Please give brief details about the HE Scheme and enclose a layout map.

Brief details on Selim H.E. Project:

The proposed Selim H.E. Project Dam is located 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 80 MW (2X40MW) would afford an annual energy generation of 373.52 Gwh, in a 90% dependable year. The tariff from the project at present cost would be Rs. 1.76/KWh (levellised).

The diversion site is located at Latitude 25° 21' 48.99" N, and Longitude 90° 11' 38.52" E. The dam site 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 above the deepest foundation level across river Myntdu to provide a live storage of 1.0 mcm with FRL at 1103.50 m and MDDL at 1093.50 m, 4.525 Km long and 3.10 m dia circular Head Race Tunnel terminating in a 37 m high 8.00 m dia surge shaft, 782.00 m long, 2.60 m dia penstock, a surface power house having an installation of 2(two) nos of Francis type generating units of 40 MW each operating under a rated head of 334.53 m.

(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 December, 2016

**NAME OF SCHEME** Selim HE Project 2 x 40 (MW)  
**SURVEY & INVESTIGATION**

- |  |  |
|--|--|
| 1. Date of commencement of S&I observation)  | 2006-2007(Hydrological                                 |
| 2. Date of Sanction<br>Dt.25.03.2008   | NEC/IRGN/MEG/2K/3/821                                  |
| 3. Likely date of completion of S& I   | 2016-2017  |
| 4. Likely date of completion of DPR  | 2017-2018  |
| 5. Estimated cost of S&I/DPR and Phasing of Expenditure  | Rs. 450.00 Lakhs                                       |
| 6. Agency of Investigation (in case of Pvt.Agency, Name, Designation, Complete.<br>Address, telephone no. & Fax No. is to be indicated). | <b>Meghalaya Power Generation Corporation Limited.</b> |

7. Details of Progress @

Quantity Done	Quantity to be done
40%	60%

- |   |   |
|---|---|
| a) Tracer Path & Approaches                       | Trace path completed  |
| b) Roads  | Roads to be taken up  |
| c) Construction of Temp. Building                 | Completed   |
| d) Purchase of Special T &P                       | Not yet taken up  |
| e) Topographic Survey/Investigation               | Completed   |
| f) Const. Material (Survey/Testing)               | To be taken up  |
| g) Hydrological observations                      | Data collection since April 2006  |
| h) Meteorological                                 | Data collection since April 2006  |
| i) Environmental Surveys                          | In Progress   |
| j) Programme of works during the year computation | Observation, compilation and<br>of hydrometeorological data of the project, shifting of dam axis, cross section survey, Intake fixation and alignment survey, preliminary geological mapping. |
| k) Overall progress of works                      | 40%   |
| l) Geological and foundation Investigations       | 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 | Rs. 450.00 Lakhs |
| 9. Expenditure incurred upto June 2016                            | Rs. 414.68 Lakhs |
| 10. Expenditure incurred upto September 2016                      | Rs. 415.18 Lakhs |
| 11. Expenditure incurred upto December 2016                       | Rs. 439.32 Lakhs |
| 12. Budget Estimate   |                  |
| 13. Revised Estimate 2016 - 17                                    |                  |
| 14. Budget Estimate 2016 - 17                                     |                  |

**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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