



EMRA – II HYDROELECTRIC PROJECT

CLIENT:

Athena Emra Power Private Limited

LOCATION:

Arunachal Pradesh, India

SCOPE OF SERVICES:

AEMPL provided engineering consultancy services for optimum utilization of Emra River and preparation of pre-feasibility report for Emra – II (315MW) HE Project and obtaining approval from statutory authorities.

PROJECT DESCRIPTION:

The Project is a run of river/storage type Hydroelectric Project on confluence of Emra & Tangon river in Dibang River, Arunachal Pradesh. AEMPL was involved in preparation of various alternatives at Pre-feasibility stage and from which one alternative is considered which is cost-effective and techno-economically layout.

The project consists of gravity dam of height 113 m and of length 256 m across River Subansiri where the river bed elevation is EL. 594 m. The water for power generation is conveyed through a steel pressure shaft of 7 m diameter which further bifurcates to feed the units in the underground power house. The underground power house is situated in the left bank of River Emra and measures 79 m (l) x 14 m (w) x 15.5 m (h). The underground power houses 3 vertical axis Francis turbines to generate 315 MW. The design energy in the calculated to be 1491.59 MU.

The following are the detailed activities involved in carrying out the assignment:

- Preparation of project layout alternatives studies for Storage vs. R-O-R type development and cascade development of Hydro Projects in Emra River.
- Preparation of hydrological studies including water availability, design flood and diversion flood studies.
- Power Potential Studies has been carried out for various alternatives in assessing the installed capacity of project in each alternative.
- Preparation of Pre-feasibility stage design, drawings and report of Emra – II HEP.