



NIARE HYDROELECTRIC PROJECT

CLIENT:

Andra Power Pvt. Ltd.

LOCATION:

Arunachal Pradesh, India

SCOPE OF SERVICES:

AEMPL engaged to provide Engineering Consultancy Services for preparation of Pre-feasibility Report (PFR) of 800 MW NiareHE Project, Arunachal Pradesh and obtaining approval from statutory authorities.

PROJECT DESCRIPTION:

Niare H.E. Project is located in upper reaches of Subansiri River, Arunachal Pradesh. The average river bed level at the dam site is about 1200 m and FRL at the dam has been proposed at EL.1280 m. The Project will utilize a gross head of 228 m and design discharge of 407.50Cumecs for generation of 800 MW.

Niare H.E Project envisages of 101.56 m high concrete gravity dam with 2Nos. of 11m diameter diversion tunnels as diversion structure, 2Nos of power intake with trash rack arrangement, 2Nos. of 3.14 km&3.10km long 8.50 m diameter head race tunnel, 2Nos. of 20.0 m diameter surge shaft&100m high, 2Nos. of 486.50mlong 7.25 m diameter steel lined pressure shaft which include penstock of dia. 5.50m on bifurcation. Underground power house housing 4 units of 200 MW each. Design Energy is 3647.39MU in 90% dependable year.

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

- Preparation of hydrological studies including water availability, design flood and diversion flood studies.
- Power Potential Studies has been carried out in assessing the installed capacity of project.
- Preparation of Pre-feasibility stage design, drawings and report for Civil, Hydro-mechanical and Electro-Mechanical components of Niare HEP.
- Cost Estimation and Financial Analysis has done at Pre-feasibility stage.