



DENGSER HYDROELECTRIC PROJECT

CLIENT:

Arista 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 520 MW Dengser Hydro Electric Project, Arunachal Pradesh and obtaining approval from statutory authorities.

PROJECT DESCRIPTION:

Dengser Hydro Electric Project is located in upper reaches of Subansiri River, Arunachal Pradesh. The average river bed level at the dam site is about EL. 531 m and FRL at the dam has been proposed at EL. 620 m. The Project will utilize a gross head of 126.63 m and design discharge of 470.90 cumecs for generation of 520 MW.

Dengser H.E Project envisages of 121.19 m high concrete gravity dam with 2 Nos. of 11 m diameter diversion tunnels as diversion structure, 2Nos of power intake with trash rack arrangement, 2 Nos. of 5.11 km & 4.96 km long 9.20 m diameter head race tunnel, 2 Nos. of 25.0 m diameter surge shaft & 50 m high & 2 Nos. of 8.10 m diameter steel lined pressure shaft each of 324 m & 264 m in length which include penstock of dia. 4.57 m on bifurcation. Underground power house housing 4 units of 130 MW each. Design Energy is 1986.92 MU in 90% dependable year.

The following are 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 Dengser HEP.
- Cost Estimation and Financial Analysis has done at Pre-feasibility stage.