

Demwe Upper 1040MW

Brief Scope of Works : Consultancy services for preparation of Detailed Project Report including all field Investigations, providing assistance in obtaining clearance of DPR.

Name of Client : Lohit Urja Private Limited

Location of Project : Arunachal Pradesh, India

About the Project :

Demwe Upper HE Project as conceived by EIPL is a Run-of-the River scheme with diurnal storage. The proposed scheme consists of a Concrete Gravity Dam of maximum height of 167.49 m and length of 371.15 m at the Top. Lohit River would be diverted through 4 diversion tunnels, each of 14.0 m diameters and average length of 1120 m. For diverting the water through the diversion tunnels an upstream coffer dam of 45.5 m height have been proposed. For the purpose of power generation, water is to be conveyed through 4 individual steel lined pressure shafts of 10.5 m diameter and lengths varying from 359.20 m to 392.85 m. These pressure shafts would feed 4 vertical Francis turbines of 272.5 MW capacity installed within a surface powerhouse located on the right bank of Lohit. An additional unit of 50 MW catering to Environmental releases downstream of the dam has also been provided.

Services Provided by EIPL :

The following activities have been successfully completed by Energy Infratech :

- Preparation of Detailed project /Engineering report and provided all the necessary assistance in obtaining Concurrence for the DPR from Central Electricity Authority of India (CEA)/ Central Water Commission of India. Following Studies were undertaken for preparation of Detailed Project Engineering Report :
 - Topographical Survey of the project area covering all major project structures and their components, reservoir, infrastructure facilities, quarry & borrow area, river etc.
 - All geological surface and sub-surface survey and investigations including drilling, drifting, etc.
 - All geological, geophysical, photo-geological studies and their interpretation including procurement, supply and interpretation of photogeological / satellite/GIS maps.
 - Construction materials survey and testing for estimation of quantities and engineering quality of various materials.
 - All Hydrological, Flood, Sedimentation and Power Potential studies considering mandatory environmental release and Fixation of optimum Project parameters based on various alternatives.

- Design and drawing of various structures and equipment based on various alternative studies, including proposal for the best alternative.
- Planning and design for various approach road.
- Planning and study for requirement and availability of construction power.
- Cost estimation for the project and financial analyses.

DPR has been submitted to by Central Electricity Authority of India (CEA), for examination & Concurrence.