
OJU SUBANSIRI HYDRO POWER CORPORATION PVT. LTD.



OJU HYDRO ELECTRIC PROJECT (1878 MW)

Arunachal Pradesh, India

1. INTRODUCTION

Navayuga Engineering Company Ltd. (NECL), a multidisciplinary Infrastructure company, signed the Memorandum of Agreements (MoA) in June, 2010 with the Government of Arunachal Pradesh (GoAP) for the development of cascading hydro projects on river Subansiri in Arunachal Pradesh.

Oju Subansiri Hydro Power Corporation Pvt. Ltd. (OSHPCPL) is the SPV implementing the Oju Hydro power Project, promoted by Navayuga Engineering Company Ltd (NECL).

2. OJU HYDROELECTRIC POWER PROJECT

Initially two hydro projects named as Oju-I (700 MW) and Oju-II (1000 MW) proposed on river Subansiri in Upper Subansiri District of Arunachal Pradesh were allotted to Navayuga for development by the Government of Arunachal Pradesh (GoAP). Subsequently, an optimization study was carried out to make the projects economically and environmentally more sound and a proposal for combining both the schemes in to one Oju Hydro Electric Project (run-of-river) was submitted as per the following layout which was agreed by the GoAP.



Layout of Combined Oju HEP as Agreed by GoAP

Installed capacity of the combined Oju HEP has been approved by the Central Electricity Authority as 1878 MW.

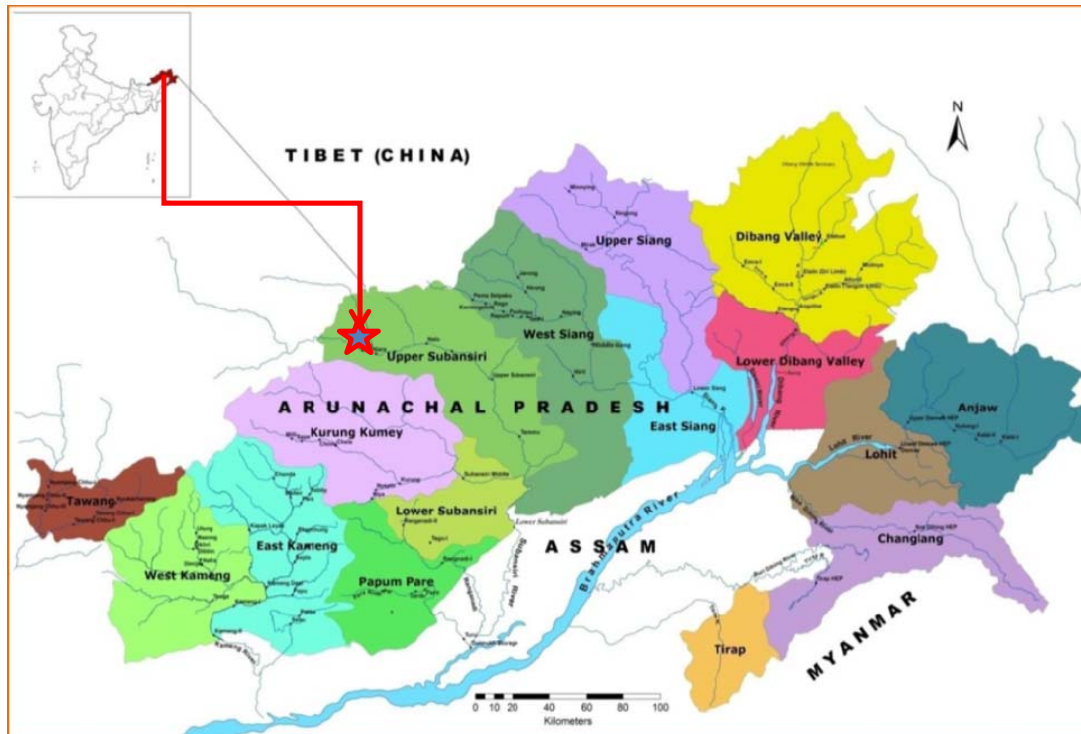
SALIENT FEATURES OF THE OJU PROJECT

1.	Installed Capacity	1878 MW
2.	Catchment Area	9827 sq. km.
3.	Submergence area	43.2 Ha.
4.	Number of villages/houses submerged	NIL
5.	Submergence of agricultural land	NIL
6.	Average Annual Yield	11339 MCM
7.	Design Flood	6031 cumec
8.	Height of dam (above river bed)	93 m
9.	Length at the top of dam	355 m
10.	Head race Tunnel (dia. & length)	10.4m, 14.17 km
11.	Underground Power House (W X H X L)	22 x 46.50 x 251.5m,
12.	Design discharge for power generation	333 cumec
13.	Rated net head	620.8 m
14.	Project completion cost	Rs. 17113 crores
15.	Design Energy in 90% dependable year	8015 MU (7856+159)
16.	Design Energy in 50% dependable year	9871 MU (9694+177)
17.	Levellised tariff (with 12% free power to the state)	Rs. 5.65 / kWh
18.	Construction Period	6 years

3. LOCATION AND ACCESS TO THE PROJECT SITE

The above project site (Dam site) is located about 220km from Daporijo, district head quarter of Upper Subansiri district in Arunachal Pradesh. At present, there is no road connecting the project area. Single lane metalled road connects Limeking with Daporijo which is about 150km. The dam site is located at about 50km upstream of Limeking and powerhouse site is located at about 25km upstream of Limeking on the right bank of Subansiri river.

Daporijo can be accessed from North Lakhimpur using either Pahumara-Kimin-Ziro-Daporijo road (300km) or Silapathar-Likabali-Basar-Daporizo road (275km). Silapathar is accessible from North Lakhimpur and Dibrugarh in Assam. Location of project site and road network to project site is shown in the following figures.



Location of Oju HEP in Arunachal Pradesh

4. STATUS OF PROJECT & CLEARANCES

Detailed project report is under preparation and field investigations are under progress. Status of DPR related clearances in respect of the project are as under:

- Clearance of Hydrology (Water Availability, Design Flood, Diversion Flood by Hydrology Dte. (E&NE), Central Water Commission.
- Power potential finalising the installed capacity of the project as 1878 MW has been cleared by the Central Electricity Authority.
- Scoping of the project (for the above-mentioned features of the project) from environmental angle and ToR for the project has been cleared by the EAC of Ministry of Environment and Forests.
- Approval of the combined scheme by the state government.
- Diamond core drilling at power house complex and dam axis is completed and drifting works are under progress.

- Topographical survey completed of whole project area.
- Component wise geological mapping completed.
- 3 season environment study completed by Environment Consultant, M/s Wapcos Ltd.
- Geotechnical testing works are under progress.

5. ENERGY BENEFITS AND SALEABLE TARIFF

Gross generating capacity of the will be 1878 MW. Energy generated will be as mentioned below:

Particulars	Unit	Details
Gross Generation capacity	MW	1878
Energy in 90% dep. Year	MU	8015
Energy saleable in 50% dep year	MU	9871
Levellised Tariff (with 12% free power to the state	Rs./unit	5.65
Number of peaking hours available	Hours	3.00

6. THE MOST FAVOURABLE ASPECTS OF THE OJU HEP

- One of the largest run of river hydro project (1878 MW) in the country
- Sound hydrological and geological features at the proposed project site
- Lowest minimum submergence of only 43 ha which is minimal for this size of the project
- Least environmental issues, as no population is getting displaced