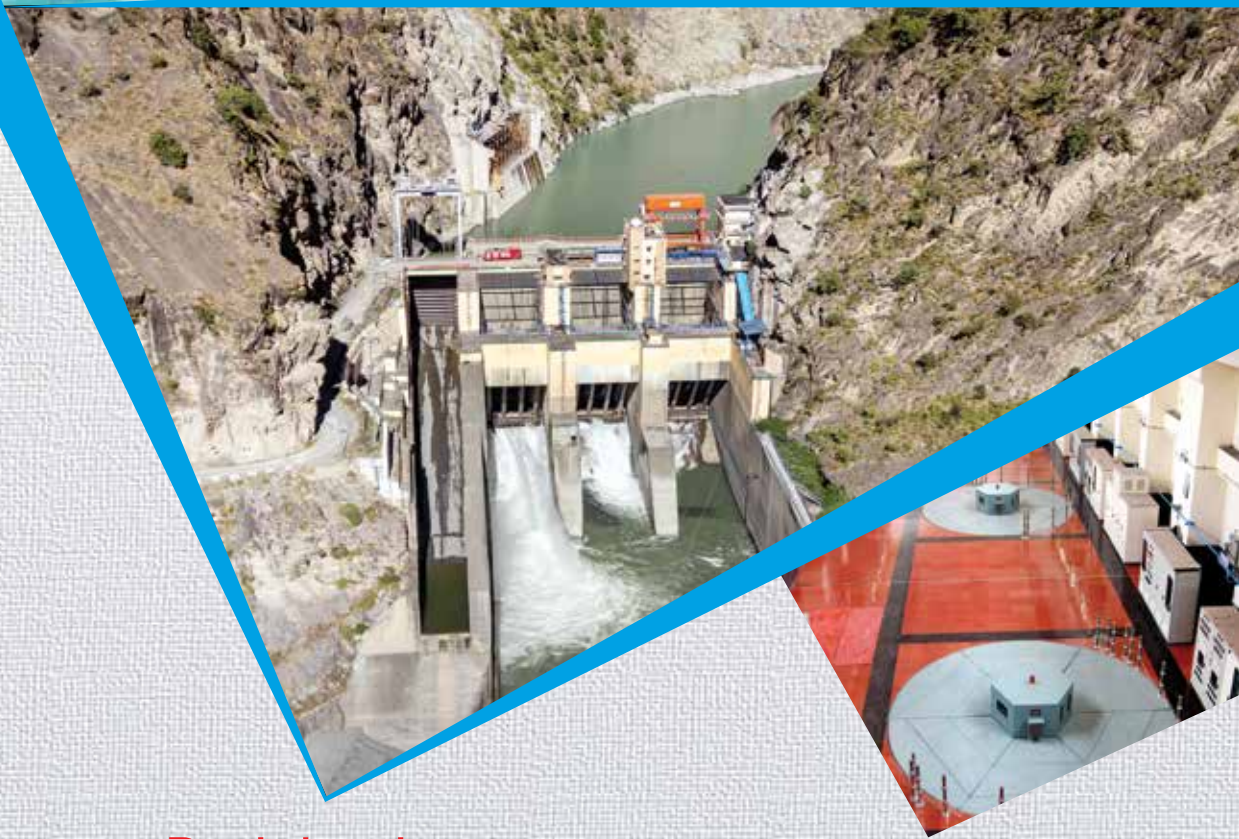




A Navratna Company



“ Power Behind

GREEN POWER”

NHPC Limited

(A Government of India Navratna Enterprise)



**94.2 MW Tanakpur Power Station
(Uttarakhand) - Barrage**

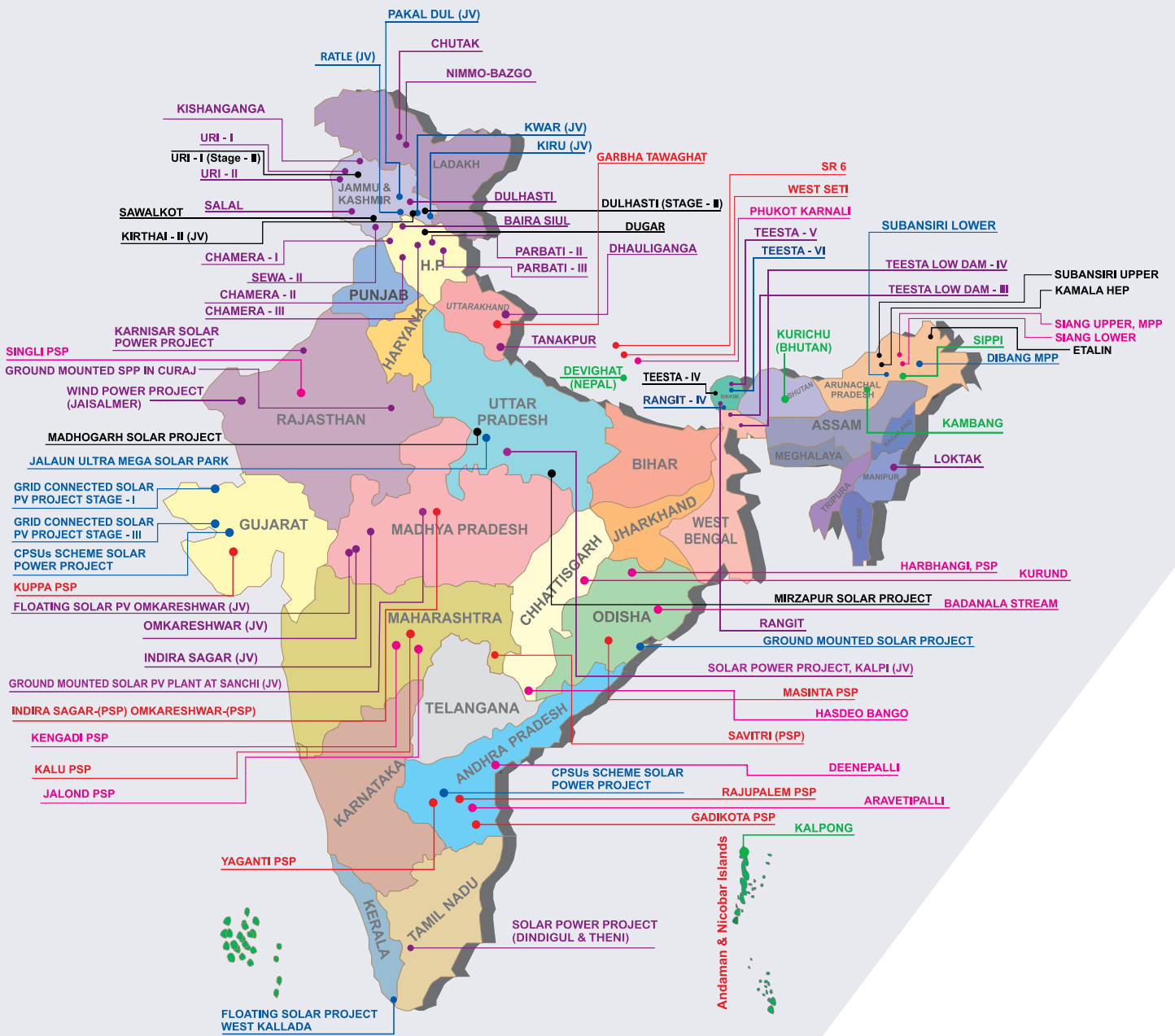
NHPC
100% GREEN ENERGY COMPANY

NHPC Limited was established in 1975. NHPC is a Government of India 'NAVRATNA' Enterprise.

With an authorized share capital of ₹17500 crore and total investment base of ₹96029.38 crore (as on 31.12.2025), NHPC is ranked as a premier organization in India for development of hydropower.

The technical and engineering proficiency and experience of NHPC places it in a leading position in the field of hydropower development in India and neighbouring countries.

FOOTPRINTS OF NHPC



- OPERATING POWER STATIONS
- PROJECTS COMPLETED ON DEPOSIT / TURNKEY BASIS
- PROJECTS UNDER CONSTRUCTION
- PROJECTS UNDER SURVEY & INVESTIGATION
- PROJECTS UNDER CLEARANCES / APPROVAL
- NEW INITIATIVES BY NHPC

NHPC - AN OVERVIEW

Year of Establishment	1975
Authorized Share Capital	₹17500 crore
Power Stations in Operation	31 (9332.90 MW)# 25 (7651.20 MW) - NHPC 6 (1681.70 MW) - In Joint Ventures
Power Stations Commissioned on Deposit/Turnkey Basis	5 (89.35 MW) - Completed outside India 2 (74.10 MW) - Completed within India 3 (15.25 MW)
Projects under Construction	17 (9204 MW)
Projects under Clearances / Approval	9 (10263 MW)
Projects under S&I	9 (9830 MW)
New Initiatives by NHPC	12 (24514 MW)

POWER STATIONS IN OPERATION

Power Station	UT/ State	Capacity (MW)	
		Own Project	in JV
Baira Siul	Himachal Pradesh	180	
Loktak	Manipur	105	
Salal	J & K	690	
Tanakpur	Uttarakhand	94.20	
Chamera-I	Himachal Pradesh	540	
Uri-I	J & K	480	
Rangit	Sikkim	60	
Chamera-II	Himachal Pradesh	300	
Dhauliganga	Uttarakhand	280	
Dulhasti	J & K	390	
Teesta-V	Sikkim	510	
Sewa-II	J & K	120	
Chamera-III	Himachal Pradesh	231	
Chutak	Ladakh	44	
TLDP-III	West Bengal	132	
Nimmo-Bazgo	Ladakh	45	
Uri-II	J & K	240	
Parbati-III	Himachal Pradesh	520	
TLDP-IV	West Bengal	160	
Jaisalmer Wind Power Project	Rajasthan	50	
Tamil Nadu Solar Project	Tamil Nadu	50	
Kishanganga	J & K	330	
Parbati-II	Himachal Pradesh	800	
Solar Power Plant, Bikaner	Rajasthan	300	
Subansiri Lower HEP##	Ar. Pradesh/ Assam	1000	
Indira Sagar*	Madhya Pradesh		1000
Omkareshwar*	Madhya Pradesh		520
Kalpi SPP**	Uttar Pradesh		65
Sanchi SPP*	Madhya Pradesh		08
Ground mounted SPP in Central University of Rajasthan, Ajmer***	Rajasthan		0.70
Floating Solar PV, Unit-D (In the Reservoir of Omkareshwar Project) (M.P)*	Madhya Pradesh		88
	TOTAL	7651.20	1681.70
	GRAND TOTAL	9332.90 MW	

NHPC has also installed 4084.34 KWp Rooftop grid connected solar power plants in its PS / CO.

* Joint venture between NHPC and Govt. of Madhya Pradesh.

** Joint Venture between NHPC and Govt. of Uttar Pradesh. Project fully commissioned on 29.03.2024.

*** Project synchronization with state grid w.e.f. 14.08.24 and started infusion of energy to CURAJ (Central University of Rajasthan, Ajmer) Project inaugurated on 05.09.24 by Hon'ble Governor, Rajasthan.

COD of Unit# 2 declared w.e.f. 00:00 hrs on 23.12.2025, COD of Unit # 3 declared w.e.f. 00:00 hrs on 01.02.26, COD of Unit # 1 declared on w.e.f. 00:00 hrs on 20.03.2026 and COD of Unit # 4 declared on w.e.f. 00:00 hrs on 08.05.2026.

POWER STATIONS COMMISSIONED ON DEPOSIT/TURNKEY BASIS

Power Station	UT/State/Country	Capacity (MW)
Abroad		
Devighat	Nepal	14.10
Kurichu	Bhutan	60.00
India		
Kalpong	Andaman & Nicobar Islands	5.25
Sippi	Arunachal Pradesh	4.00
Kambang	Arunachal Pradesh	6.00
TOTAL		89.35

PROJECTS UNDER CONSTRUCTION

Project	UT/State	Capacity (MW)	Project Cost (In Cr.)
(A) NHPC - Own			
Hydro			
Subansiri Lower HEP	Ar. Pradesh/ Assam	1000#	29948.22
Dibang Multipurpose	Arunachal Pradesh	2880	31876.39
Teesta-VI	Sikkim	500	5748.04
Uri-I Stage-II	J&K	240	2708.95
Dulhasti Stage-II	J&K	260	2993.96
Sub Total		4880	73275.56
Solar			
1000 MW CPSUs scheme Solar PV Power Project(s) anywhere in India			
600 MW	Gujarat	600	4295.63
100 MW	Andhra Pradesh	100	577.20
Ground Mounted Solar Power Project, Ganjam	Odisha	40	151.74
Floating Solar Power Project, West Kallada	Kerala	50	259.72
200 MW Grid connected Solar PV Project (600 MW Solar Park at Khavda), Stage- I	Gujarat	200	929
200 MW Grid connected Solar PV Project (600 MW Solar Park at Khavda), Stage- III	Gujarat	200	854.10
Sub Total		1190	7067.39
Total- A (Own)		6070	80342.95
(B) JVs / Subsidiaries			
Hydro			
Rangit- IV	Sikkim	120	1888.67
Rattle	J&K	850	5281.94
Pakal Dul	J&K	1000	12728
Kiru	J&K	624	5409
Kwar	J&K	540	4526.12
Solar			
Jalaun Ultra Mega Solar Park, 1200 MW (BSUL, JV with UPNEDA)	Uttar Pradesh	##	796.96
Sub Total (JVs/Subsidiaries)		3134	30630.69
GRAND TOTAL (A+B)		9204	110973.64

COD of Unit# 2 declared w.e.f. 00:00 hrs on 23.12.2025, COD of Unit # 3 declared w.e.f. 00:00 hrs on 01.02.26, COD of Unit # 1 declared on w.e.f. 00:00 hrs on 20.03.2026 and COD of Unit # 4 declared on w.e.f. 00:00 hrs on 08.05.2026.

Not included in capacity addition.



PROJECTS UNDER SURVEY & INVESTIGATION

Project	UT/State	Installed Capacity (MW)	Remark
(A) NHPC - Own			
Hydro			
Garba Tawaghat HEP	Uttarakhand	630	
West Seti	Nepal	800	DPR of the project forwarded to IBN, Nepal.
SR 6	Nepal	460	Final DPR of SR-6 has been submitted to IBN, Nepal.
	Sub Total	1890	
Pump Storage Projects			
Savitri PSP	Maharashtra	2400	DPR is under preparation.
Masinta PSP at Deogarh (Up-Stream of Rengali Reservoir)	Odisha	1000	Preparation of DPR is under progress.
Kuppa PSP	Gujarat	900	PFR of Kuppa PSP has been prepared and submitted to "Energy and Petrochemical Department," Govt. of Gujarat on dated 31.08.2024.
Kalu PSP	Maharashtra	1800	<ul style="list-style-type: none"> PFR submitted to Additional Chief Secretary, WRD, Govt. of Maharashtra on 18th March 2025. Topography survey completed in May'25. Water allocation of 7.5 MCM for initial filling and 0.40 MCM for annual recoupment has been received from WRD, Govt. of Mah. on 25.08.2025. Layout Finalisation Chapter submitted to CEA on 26.09.25
	Sub Total	6100	
	Total (A) - Own	7990	
(B) NHPC - JVs / Subsidiaries Pump Storage Projects			
Indirasagar-Omkareshwar PSP (On Stream)	Madhya Pradesh	640	DPR Preparation is under progress.
Gadikota PSP	Andhra Pradesh	1200	Projects is being executed through APGENCO NHPC Green Energy Ltd. (ANGEL), JV of NHPC. Preparation of DPR is under progress.
	Total (B) - JVs	1840	
	Total (A+B)	9830	

PROJECTS UNDER CLEARANCES / APPROVAL

Project	UT/State	Installed Capacity (MW)	Clearances Pending as on 01.03.2026
(A) NHPC - Own			
Hydro			
Teesta- IV	Sikkim	520	FC-II
Sawalkot	J&K	1856	FC-II
Dugar	Himachal Pradesh	500	FC-I & II, EC
	Sub Total	2876	
(B) Projects in Joint Venture			
Hydro			
Kirthai- II	J&K	820	FC-I & II, EC, IWT
Kamala	Arunachal Pradesh	1720	FC-I, II & EC
Subansiri Upper	Aunachal Pradesh	1605	TEC, FC-I, II, EC
Etalín HEP	Arunachal Pradesh	3097	FC-II
	Sub Total	7242	

Solar			
Mirzapur Solar Project (BSUL, JV with UPNEDA)	Uttar Pradesh	100	PPA & Investment approval.
Madhogarh Solar Project (BSUL, JV with UPNEDA)	Uttar Pradesh	45	PPA & Investment approval.
	Sub Total	145	
	Total J.V (B)	7387	
	Grand Total (A+B)	10263	

NEW INITIATIVES BY NHPC

Project	Country/ State	Installed Capacity (MW)	Remarks
A) Hydro Projects in Nepal			
Phukot Karnali (Inception report submitted on 30.08.23)	Nepal	624	MoU between NHPC and VUCL exchanged on 01.06.2023 for development of Phukot Karnali Project. Further, Review of DPR submitted to VUCL on 30.03.2024.
	Sub Total	624	
B) Hydro (Indicated by MOP)			
Siang Lower	Arunachal Pradesh	2700	As parameters of Siang Upper Multipurpose Project are under finalization and may impact project parameters of Siang Lower HEP.
Siang Upper Multipurpose Project	Arunachal Pradesh	11200	The PFR, considering Three (03) Alternatives i.e. at Uggeng, Dite Dime and Parong, submitted by NHPC to MoJS on 30.12.2022.
	Sub Total	13900	
C) Pump Storage Plants			
Kengadi PSP	Maharashtra	900	PFR submitted to Govt. of Maharashtra on 22.11.2023.
Jalond PSP	Maharashtra	2400	MoU signed with Deptt. of Energy, Govt. of Maharashtra on 06.06.2023.
Harbhangi	Odisha	1020	A site visit was carried out by a team of NHPC Officials for PFR study of Haribhangi and Badanalla PSPs from 05.05.25 to 09.05.2025.
Badanala Stream	Odisha	800	
Kurund	Chhattisgarh	1000	Evaluation study completed. Preparation of PFR is under progress.
Hasdeo Bango	Chhattisgarh	800	
Singli PSP	Rajasthan	1000	An MOU has been signed between NHPC and Rajasthan Renewable Energy Corporation (RRECL) on 06.12.2024.
Aravetipalli	Andhra Pradesh	1320	The JV Company (APGENCO NHPC Green Energy Ltd. - ANGEL) has been incorporated on 23.01.2025. The feasibility study report completed for all three Projects. DPR preparation works to be taken up.
Deenepalli	Andhra Pradesh	750	
	Sub Total	9990	
	Grand Total (A+B+C)	24514	

SUBSIDIARIES / JOINT VENTURES

- **NHDC Limited** - JV with Govt. of Madhya Pradesh.
- **Chenab Valley Power Projects Limited** - JV with JKSPDC in UT of J&K.
- **Ratle Hydroelectric Power Corporation Limited** - Incorporated with NHPC & JKSPDC holding equity share of 51% & 49% respectively. The JVC will implement 850 MW Ratle HEP in UT of J&K.
- **Lanco Teesta Hydro Power Limited** - Wholly owned subsidiary of NHPC for Teesta-VI HEP (500 MW) in Sikkim.
- **APGENCO NHPC Green Energy Ltd. - ANGEL** - JV of NHPC & Andhra Pradesh Power Generation Corporation (APGENCO), Andhra Pradesh. Both companies hold a 50:50 equity stake.
- **Jal Power Corporation Limited**- Wholly owned subsidiary of NHPC for Rangit-IV HEP (120 MW) in Sikkim.
- **NHPC Renewable Energy Limited (NREL)**- Wholly owned subsidiary of NHPC for development of Renewable Energy, Small Hydro and Green Hydrogen based business.
- **Bundelkhand Saur Urja Limited** - JV with UPNEDA, Govt. of Uttar Pradesh
- **Loktak Downstream Hydroelectric Corporation Limited** - JV with Govt. of Manipur.
- **National High Power Test Laboratory Pvt. Limited** - JV with NTPC, PGCIL, CPRI and DVC.

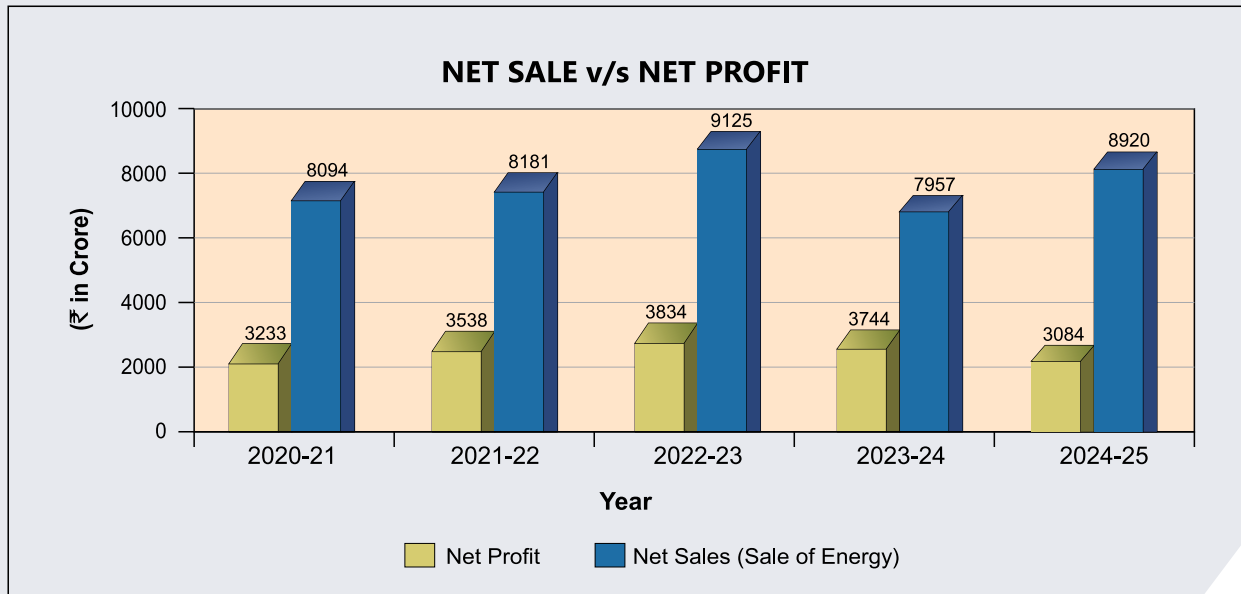


FINANCIAL HIGHLIGHTS

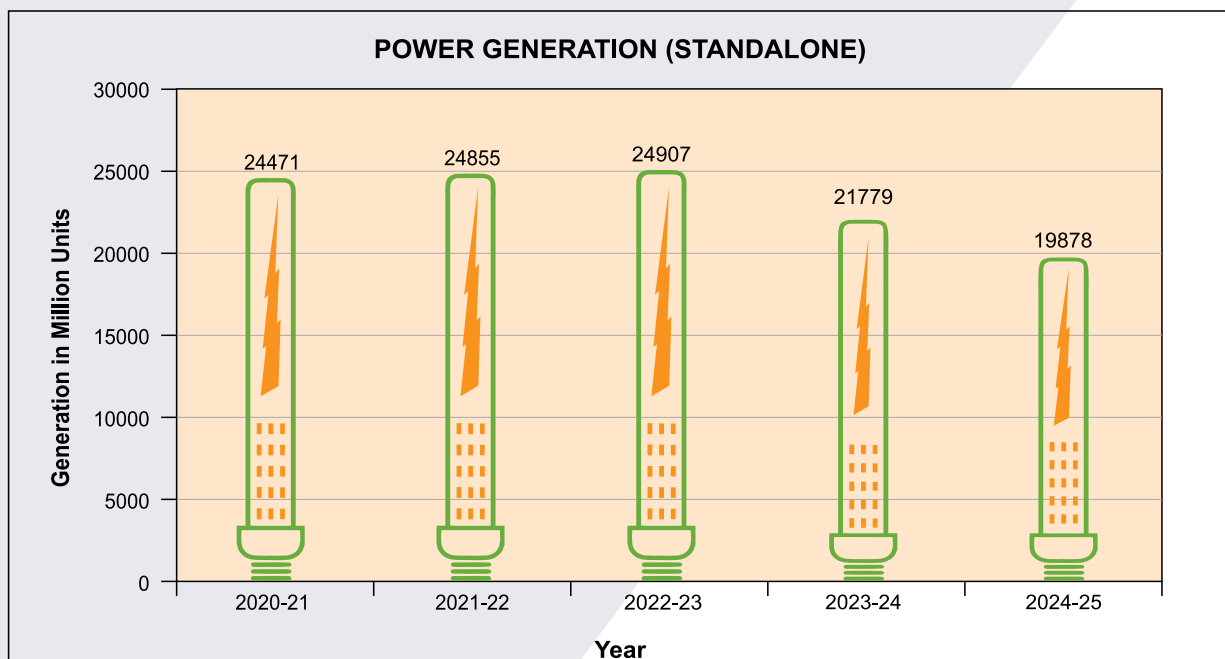


“Started power generation in 1982 with a turnover of ₹ 24 crore and net profit of ₹ 7.68 crore.”

“Listed on Indian bourses - BSE & NSE w.e.f. 1st September 2009 after successfully concluding its IPO worth over ₹ 6000 crore.”



POWER GENERATION



NHPC'S CAPABILITIES

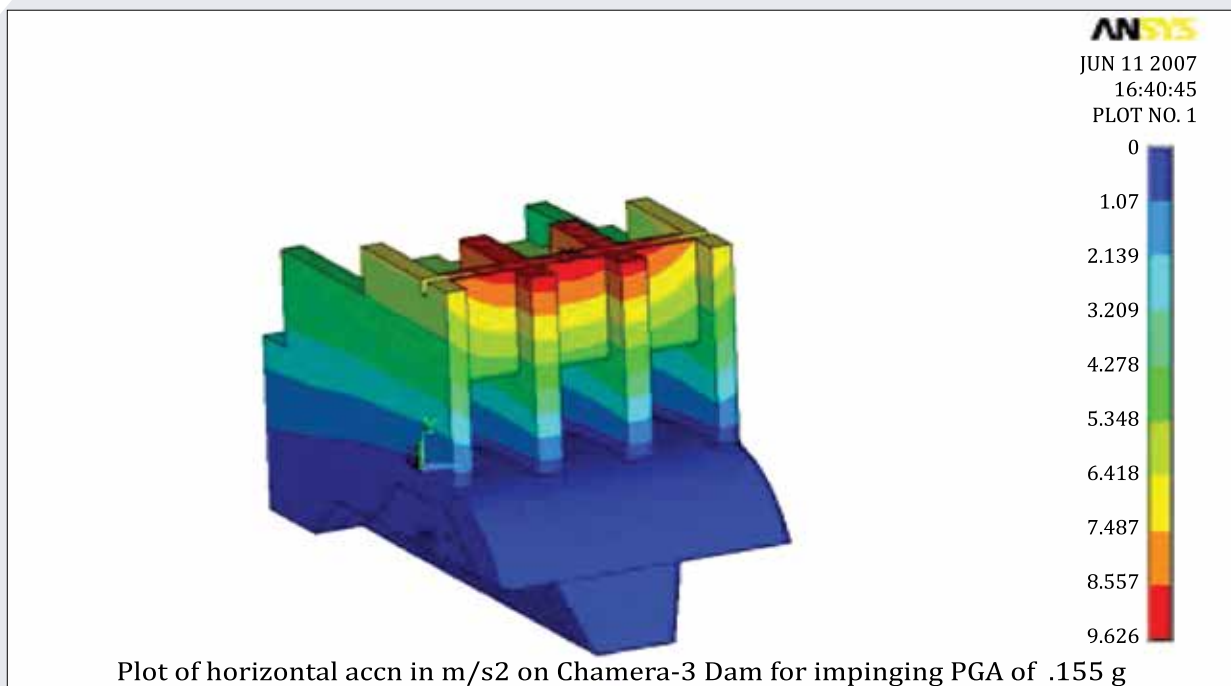


- Planning, Investigation, Design & Engineering and Execution of Hydroelectric Projects from concept to commissioning.
- Operation, Maintenance Renovation and Modernization & Dam safety evaluation.
- Development of Solar and Wind Power projects.
- Real time monitoring and alert generation by master control room as early warning system for hydropower developers.

DESIGN & ENGINEERING

Design & Engineering is a major thrust area for NHPC. Its Design division is well equipped with modern design tools and a well trained manpower which handles the planning and design of all componets associated with hydropower projects from concept to commissioning including trouble shooting during construction as well as O&M stages of projects.

NHPC has gathered vast experience in construction of underground structures in the complex Himalayan geology which is used for evolving constructable designs for its own projects as well as for consultancy assignments relating to Design & Engineering of hydro-projects in India & abroad.



EXPERTISE IN RCC DAM CONSTRUCTION



Roller Compacted Concrete (RCC)

uses construction process, which combines the economical and rapid placing techniques used for fill dams with the strength and durability of concrete.

160 MW TEESTA LOW DAM-IV POWER STATION, WEST BENGAL

First Roller Compacted Concrete (RCC) dam by NHPC and is only the third of its kind in India.

MAJOR FEATURES OF RCC DAM

160 MW Teesta Low Dam-IV Power Station, West Bengal

Height of Dam (from deepest foundation)	45 m
Total volume of concrete in dam	170000 cum



160 MW Teesta Low Dam- IV Power Station (West Bengal)

GEOLOGICAL AND GEOTECHNICAL CAPABILITIES



NHPC has been pioneering in development of engineering geological and geotechnical appraisal for civil structures related to hydropower/pump storage projects.

Complete rockmass characterization for design of all civil structures of hydropower /pump storage projects is the forte of engineering geologists in NHPC.

Capability to explore entire spectrum of geological, geophysical, geotechnical and construction material investigations related to hydropower and pump storage projects.

NHPC has a Fully-equipped Geotechnical lab to carry out laboratory rock mechanics test. It is a lab with prestigious ISO/IEC-17025:2017 accreditation from National Accreditation Board for Testing and Collaboration Laboratories (NABL). This lab is equipped to conduct all lab rock mechanic tests required for Geology chapter of DPR of hydropower projects.

Sophisticated remote sensing lab with capabilities to generate topographic survey maps from satellite imageries for optimization of layout in inaccessible areas.

Geological Studies

- To plan, investigate and monitor the Geological and Geotechnical, aspects of hydropower/Pump storage projects in an efficient and scientific manner including preparation of feasibility and detailed project reports(DPR) in accordance with the regulations laid down by the Govt. of India.
- To provide geological recommendations to avoid or to minimize the threat of geological uncertainties (fault, thrust, thick shear zone, poor rockmass condition, high ingress of ground water, rock bursting, squeezing ground condition) in surface and underground space being faced during construction of various civil structures (Dam, Head Race Tunnel (HRT), Powerhouse (surface or underground).
- Timely acquisition of progressive geological and geotechnical data for optimization of layout and modification in rock support system/change in design layout during investigation stage & construction stage respectively.

Construction

Materials Studies

- Capability to conduct in-house field survey, in-situ / laboratory tests and advice on the availability of suitable construction materials studies in terms of quality and quantity vis-a-vis the project requirements and to assess the techno-economic viability of the project.

Geophysical Studies

- Expertise in geophysical studies for investigation, construction and post construction stages.
- Geophysical techniques like Seismic Refraction/Reflection, Resistivity Imaging, liquefaction potential assessment techniques.
- Application of advanced geophysical techniques like High Resolution Seismic Tomography and Resistivity Imaging for investigations in complex geological terrains.
- Tunnel Seismic Prediction for assessment of geological conditions ahead of tunnel face is available only with NHPC in India.

Seismological Studies:

- NHPC has setup 57 Accelerograph for earthquake monitoring at all its power station and JVs projects covering entire Himalayas.
- A Real Time Seismic Data Centre has been established in NHPC for continuous online monitoring of all power stations. NHPC is the only Power utility in the country to have such data centre.
- Technical coordination for Site Specific Design Parameter & Seismological Studies like Micro Earthquake/Local Earthquake Tomograph/MT survey for large dams in accordance with NCSDP guidelines & Dam Safety Act, 2021.
- NHPC has developed mitigation plan w.r.t. Reservoir Triggered Seismicity in the Himalayas/liquefaction potential assessment etc.

SURVEY & INVESTIGATION CAPABILITIES



Investigation is an intrinsic aspect of hydropower project during all stages of its development. NHPC is equipped with various state-of-art technologies/instruments and capable of undertaking various investigations.

Early Warning System

To minimize damages from floods in the upper Himalayan region, NHPC has developed a Central Control Room and Command Stations for Early Warning System (EWS) catering to hydropower projects of NHPC as well as of other entities. EWS is equipped with automatic instruments (AWLR and telemetry) and has strategic tie-ups with different expert agencies (IMD, CWC, DGRE, NRSC and NGRI).

Topographical Survey

- Expertise in carrying out all kinds of survey works required during planning, construction and maintenance of Engineering Projects.
- Capable of producing topographical maps, DEM\DTM from data acquired by conventional as well as photogrammetry and remote sensing techniques.
- Latest survey equipments such as GNSS System , Reflector less Total Station, Long Range 3D Terrestrial Laser Scanner and Latest Softwares.
- More than 50,000 Hectare survey has been carried by Conventional Method.
- Maps of more than 35 projects has been developed by photogrammetry and remote sensing techniques.

Exploratory Drilling

- Equipped with the latest technologies and expert drilling crew for carrying out exploratory drilling works in difficult terrain and remote areas.
- More than 40000 meters of drilling/ works completed.
- Expertise in carrying out exploratory core drilling works in river beds.
- Latest Swedish Diamec drilling rigs for doing fast core drilling.

CONSTRUCTING INDIA'S LARGEST HYDROPOWER PROJECT



2880 MW DIBANG MULTIPURPOSE PROJECT

Situated on river Dibang in Lower Dibang Valley District of Arunachal Pradesh, the 2880 MW Dibang Multipurpose Project is being implemented by NHPC. The Project is expected to generate 11,223 MUs (Million Units) of electricity. After construction, the Project will be one of the biggest projects in terms of power generation in India. The Project has been conceived as a Reservoir Scheme for flood moderation and lean season peaking.

Major Features

Height of Concrete Gravity Dam from deepest foundation - 278 m (One of the highest dams in India/Asia)
Total volume of Concrete in Dam - 190 lakh cum (approx.)
Large gross storage at MWL (EL 538.00 m) - 3510 MCM



2880 MW Dibang Multipurpose Project, Dam Site - Arunachal Pradesh

CONSULTANCY & BUSINESS DEVELOPMENT



NHPC is providing consultancy in the various fields of hydropower viz. river basin studies, survey works, design & engineering, reservoir sedimentation studies, hydraulic transient studies, geological studies, geo-technical studies, contract management, construction management, equipment planning, underground construction, testing, commissioning, operation & maintenance and renovation, modernization & updating of hydropower stations etc. to leading organizations globally. Major consultancy assignments are from Central and State Government agencies in India and neighboring countries like Bhutan, Myanmar, Tajikistan and Ethiopia.

720 MW Mangdechhu Hydroelectric Project - Dam (Bhutan)

GLOBAL INITIATIVES



NHPC plans to continue expanding its international operations and help in harnessing the hydro potential available internationally by leveraging its existing relationship and goodwill earned through past consultancy assignments.

Bhutan

- Chamkharchhu-I Hydroelectric Project
- Kuri Gongri Basin Projects
- Mangdechhu Hydroelectric Project

Tajikistan

Varzob Hydroelectric Project

Nigeria

Shiroro Hydroelectric Power Station

Ethiopia

Ethiopia Electric Power Company

Nepal

- West Seti Hydroelectric Project
- SR-6 Hydroelectric Project
- Phukot Karnali Project

Myanmar

- Tamanthi Hydroelectric Project
- Shwezaye Hydroelectric Project

BUSINESS INITIATIVES



510 MW Teesta-V Power Station (Sikkim) - Power House

- Memorandum of Understanding signed between NHPC and Vidhyut Utpadan Company Limited (VUCL), Nepal for development of Phukot Karnali Hydro Electric Project (624 MW) in Nepal.
- Memorandum of Understanding signed between NHPC and Water Resource department Govt. of Maharashtra on 03.09.2024 for the development of Pumped Storage Schemes and other Renewable Energy Source Projects in State of Maharashtra.
- MOU has been signed on 08.08.2022 between NHPC and Investment Board of Nepal for development of West Seti (750 MW) and SR 6 (450 MW) Projects in Nepal.
- MOU signed between NHPC and KSEB on 16.06.2023 for providing Consultancy Services to KSEB for HE Project in the state of Kerala.
- MOU has been signed on 23.06.2023 between NHPC and Govt. of Odisha for development of PSP and RE Projects in the state of Odisha.
- MOA signed between Government of Arunachal Pradesh and NHPC on 12.08.2023 for implementation of two Hydro Projects aggregating to 3800 MW (Kamla HEP- 1800MW and Subansiri Upper HEP- 2000MW) in the state of Arunachal Pradesh.
- NHPC and Rajasthan Renewable Energy Corporation Limited (RRECL) signed a Letter of Intent (LOI) for development of 10000 MW Renewable Energy (RE) Projects/ Parks in the state of Rajasthan.
- Government of Tripura has allotted 04 numbers of PSP sites to NHPC for detailed Survey & Investigation Works and their subsequent Implementation based on their techno-commercial viability.
- An MOU has been signed between NHPC and ONGC on 15.12.2023 for Cooperation in exploration and development of Pumped Hydro Storage and other Renewable Projects.

STRATEGIC DIVERSIFICATION IN RENEWABLES



300 MW Solar Power Project, Bikaner (Rajasthan)

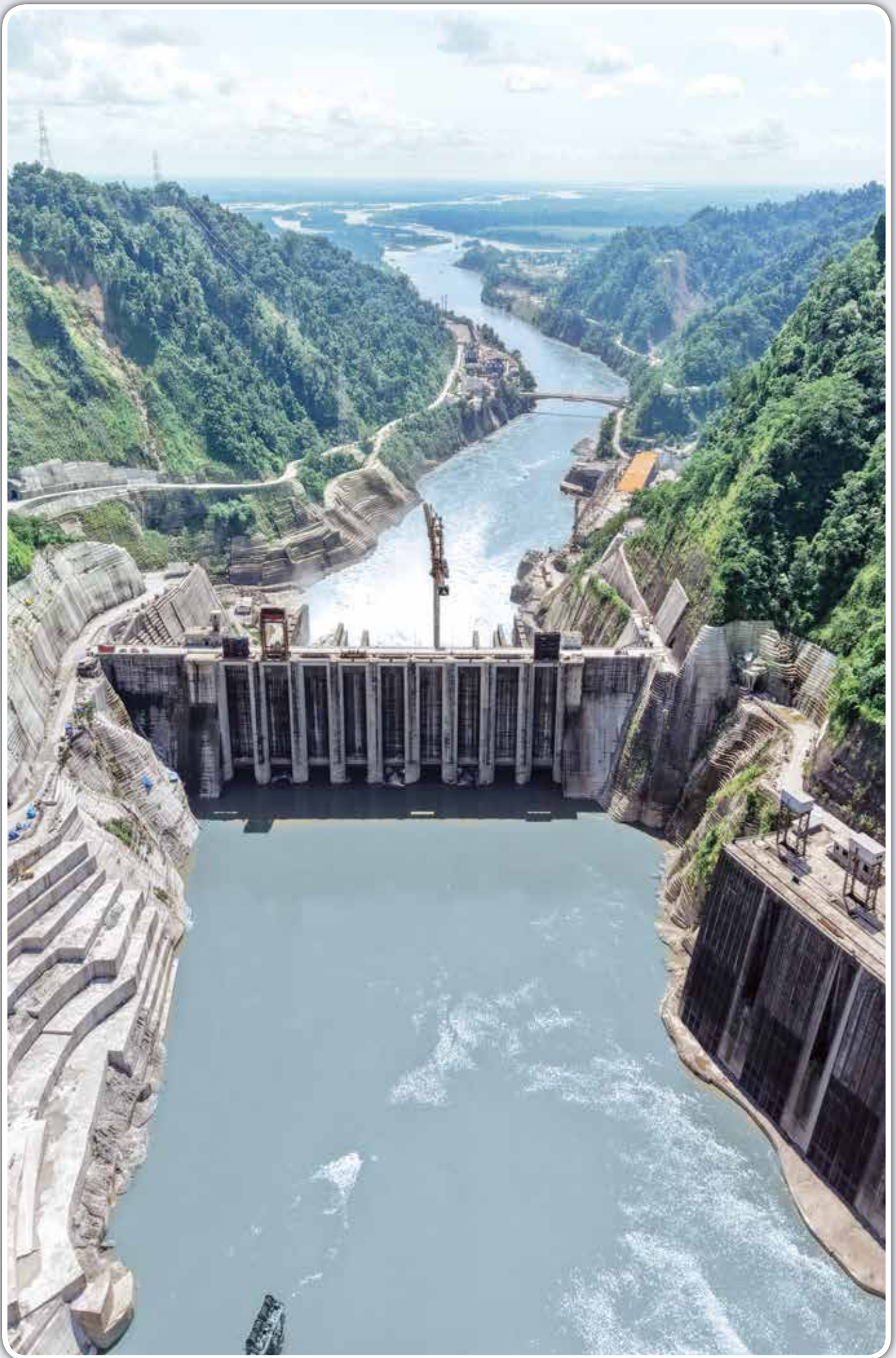
Achievements

- Bundelkhand Saur Urja Limited (BSUL), a JV has been promoted for development of Solar Power in Uttar Pradesh. 65 MW Kalpi Solar Power Project being implemented by BSUL was fully commissioned on 29.03.2024.
- 50 MW Solar Project in Tamil Nadu has been commissioned on 23.03.2018.
- NHPC's first Wind Power Project of 50 MW capacity at Jaisalmer, Rajasthan was successfully commissioned on 30.09.2016.
- Cumulative 700 MW capacity solar power projects awarded by NHPC Limited as intermediary procurer have been successfully commissioned in Rajasthan.

Upcoming Projects

- 40 MW Solar Power Project in Ganjam, Odisha under Solar Park Scheme.
- 1000 MW capacity under CPSU scheme has been awarded to NHPC by IREDA & further NHPC has awarded EPC contract on 12.05.2022 for 1000 MW.
- 6660 MW Solar, FDRE and Hybrid projects awarded to Developers under REIA scheme through tariff based competitive bidding are under implementation.
- 1200 MW Solar Park Development in Jalaun (UP) through BSUL.
- 50 MW floating Solar Power Project in Kerala.





2000 MW Subansiri Lower HEP (Assam / Arunachal Pradesh) - Dam



A Navratna Company

NHPC Limited

(A Government of India Navratna Enterprise)

Corporate Office: NHPC Office Complex, Sector-33, Faridabad-121003, INDIA
CIN: L40101HR1975GOI032564, Website: www.nhpcindia.com

Follow NHPC at :

