GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.1269 ANSWERED ON 10.03.2025

STATUS OF UPPER INDRAVATI PROJECT AND PUMPED STORAGE IN THE COUNTRY

1269 SHRI SUBHASISH KHUNTIA: DR. SASMIT PATRA: SHRI MUZIBULLA KHAN:

Will the Minister of **POWER** be pleased to state:

- (a) the current status of the 600 MW Upper Indravati Hydro Electric Project in the State of Odisha;
- (b) the current status of pumped storage projects in the country, including ongoing and proposed projects;
- (c) the estimated potential of 'on-river pumped storage' in the country, and the steps being taken to harness this potential for enhancing grid stability and renewable energy integration; and
- (d) the details on the timelines, progress and any challenges being faced in these areas?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a): Central Electricity Authority (CEA) has accorded concurrence to Upper Indravati Pumped Storage Project (PSP) (600 MW) of Odisha Hydro Power Corporation Ltd. (OHPC), a Government of Odisha undertaking, in Odisha on 19.08.2024. Further, High Level Clearance Authority (HLCA), Govt. of Odisha has accorded approval to the project on 07.12.2024.
- (b): At present, the country is having eight (8) nos. of PSPs with aggregate installed capacity of 4,746 MW (**Details at Annexure-I**). Besides, six (6) nos. of PSPs with aggregate installed capacity of 8,450 MW are under construction (**Details at Annexure-II**). Further, four (4) nos. of PSPs with aggregate installed capacity of 4,100 MW have been concurred by CEA (**Details at Annexure-III**).
- (c): As per information available in CEA, the exploitable potential of on-river PSPs in the country is about 61,975 MW. To harness the hydro pumped storage potential, the Government of India has taken various initiatives, which are as under:
 - i. Guidelines to promote development of PSPs in the country was issued on 10th April, 2023.

- ii. Budgetary support towards cost of enabling infrastructure, i.e. roads, bridges, ropeways, railway siding, communication infrastructure and Transmission Line from power house to the nearest pooling point, including upgradation of pooling substations of State or Central Transmission Utility.
- iii. Waiver of Inter State Transmission System (ISTS) charges.
- iv. Hydro Renewable Energy Consumption Obligation by Designated Consumers.
- v. Reduction of timeline by CEA for concurrence of Detailed Project Reports (DPR) of PSPs.
- (d): The major challenges being faced in development of PSPs, which impacts timelines and financial viability of projects, are:
 - i. Complex process of preparation & appraisal of DPRs and Environment/Forest Clearance.
 - ii. Imposition of Green Energy cess, water tax, reservoir lease charges and Electricity Duty by some States.

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1269 ANSWERED IN THE RAJYA SABHA ON 10.03.2025

Installed Capacity of PSPs in the Country

| Sl. No. | Utilities/ Stations | Capacity (MW) |
|---------|-----------------------|---------------|
| A | Western Region (WR) | |
| | GUJARAT | |
| | State Sector | |
| | GSECL | |
| 1 | Kadana | 240 |
| | SSNNL | |
| 2 | Sardar Sarovar RBPH | 1200 |
| | Sub Total Gujarat | 1440 |
| | MAHARASHTRA | |
| | State Sector | |
| | MAHAGENCO | |
| 3 | Ghatgarh | 250 |
| | Private Sector | |
| | Tata Power Company | |
| 4 | Bhira | 150 |
| | Sub-Total Maharashtra | 400 |
| | Total WR | 1840 |
| В | Southern Region (SR) | |
| | TELANGANA | |
| | State Sector | |
| | TSGENCO | |
| 5 | N J Sagar | 706 |
| 6 | Srisailam LBPH | 900 |
| | Sub-Total TELANGANA | 1606 |
| | TAMIL NADU | |
| | State Sector | |
| | TANGEDCO | |
| 7 | Kadamparai | 400 |
| | Sub-Total TAMIL NADU | 400 |
| | Total SR | 2006 |
| С | Eastern Region (ER) | |
| | WEST BENGAL | |
| | State Sector | |
| | WBSEDCL | |
| 8 | Purulia | 900 |
| | Sub-Total West Bengal | 900 |
| | Total ER | 900 |
| | Total- All India | 4746 |

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1269 ANSWERED IN THE RAJYA SABHA ON 10.03.2025

List of PSPs under construction

| S. No. | Name of the Project (Executing Agency) | State / UT | Cap. Under Execution (MW) | Year of commissioning |
|---------------------------|--|-------------------|------------------------------|-----------------------|
| | Central Sector | | | |
| | THDC | | | |
| 1 | Tehri PSS (THDC) | Uttarakhand | 1000 | 2025-26 |
| | Sub-Total: Central Sec | ctor | 1000 | |
| | State Sector | | | |
| | APGENCO | | | |
| 2 | Upper Sileru PSP (APGENCO) | Andhra Pradesh | 1350 | 2028-29 |
| | KPCL | | | |
| 3 | Sharavathy Pumped Storage Project | Karnataka | 2000 | 2029-30 |
| | TANGEDCO | | | |
| 4 | Kundah Pumped Storage Phase-I,II&III) | Tamil Nadu | 500 | 2025-26 |
| | Sub-Total: State Sect | 3850 | | |
| | Private Sector | | | |
| | Greenko | | | |
| 5 | Pinnapuram (Greenko AP01 IREP Private Limited) | Andhra Pradesh | 1680 | 2025-26 |
| 6 | MP30 Gandhi Sagar | Madhya | 1920 | 2028-29 |
| | Pumped Storage Project (Greenko MP01 IREP Private Limited) | Pradesh | | |
| Sub-Total: Private Sector | | | 3600 | |
| | Total: | | 8450 | |

ANNEXURE-III

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1269 ANSWERED IN THE RAJYA SABHA ON 10.03.2025

List of PSPs concurred by Central Electricity Authority (CEA)

| S. No | Scheme | Sector | State | Developer | Installed Capacity (MW) | CEA Concurrence Date |
|----------|------------------------|---------|-------------|-------------------------------|-------------------------------|----------------------------|
| 1 | Upper Indravati PSP | State | Odisha | OHPC | 600 | 19.08.2024 |
| 2 | Bhavali PSP | Private | Maharashtra | JSW Energy PSP Two Limited | 1500 | 24.09.2024 |
| 3 | Bhivpuri PSP | Private | Maharashtra | TPCL | 1000 | 30.09.2024 |
| 4 | Turga PSP | State | West Bengal | WBSEDCL | 1000 | 05.10.2016 |
| | Total | | | | | |
