

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.707
ANSWERED ON 23.07.2026**

ROADMAP ON PUMPED STORAGE PROJECTS

**707. SHRI SUBBARAYAN K:
COM. SELVARAJ V:**

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

- (a) whether the Central Electricity Authority (CEA) has brought out a roadmap on Pumped Storage Projects (PSPs) revealing that the progress in translating the pumped storage potential into commissioned capacity has been uneven and slow; and
- (b) if so, the details of the bottlenecks identified in the execution of such projects and the remedial measures proposed to be taken in this regard?

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : The Central Electricity Authority (CEA) has prepared a roadmap to achieve 100 GW of Pumped Storage Project (PSPs) capacity addition by 2035-36. The roadmap presents a comprehensive assessment of the current status of pumped storage development in the country, State-wise assessed potential, and the projected capacity addition trajectory up to 2035-36, keeping in view the increasing penetration of Variable Renewable Energies (VREs) and the corresponding need for long duration storage. The report also outlines key policy, regulatory and institutional measures required for expeditious development and improved viability of PSPs, including aspects related to project clearances, transmission planning, and manufacturing preparedness.

(b) : The development of Pumped Storage Projects (PSPs) is impacted by various challenges including difficulties in carrying out survey and investigation activities in forest areas, issues related to land acquisition, Rehabilitation and Resettlement (R&R), Eco-Sensitive Zones, high initial capital costs, and delays in the creation of essential infrastructure. To address these challenges and facilitate accelerated development of PSPs, the following measures have been taken:

- (i) Ministry of Power (MoP) has notified Guidelines to promote development of Pumped Storage Projects in the country on 10.04.2023.

- (ii) Budgetary Support towards Cost of Enabling Infrastructure, i.e., roads/bridges, railway sidings, ropeways, communication infrastructure and transmission line from power house to nearest pooling point.**
- (iii) To provide a transparent, fair, standardized procurement framework based on open competitive bidding with appropriate risk-sharing between various stakeholders, MoP vide Gazette notification dated 06.02.2025, has notified tariff based competitive bidding (TBCB) guidelines for procurement of storage capacity/stored energy from pumped storage plants.**
- (iv) The Central Electricity Regulatory Commission (CERC), vide its notification dated 26.06.2025, has provided for 100% waiver of Inter-State Transmission System (ISTS) charges for Pumped Storage Projects (PSPs) for a period of 25 years from the Commercial Operation Date (COD), in respect of projects for which the construction work is awarded on or before 30.06.2028.**
- (v) The Government of India, vide Gazette notification dated 01.08.2025, has revised the capital expenditure limit for schemes related to setting up hydro generating stations to ₹3,000 crore, requiring the concurrence of the CEA. Further, the Government has exempted off-stream closed-loop pumped storage schemes, irrespective of the quantum of capital expenditure, from the requirement of concurrence by the CEA.**
- (vi) Central Electricity Authority (CEA) has revised Guidelines for formulation and concurrence of Detailed Project Report (DPR) of PSPs. Under the revised guidelines, the timeline for concurrence of DPR has been reduced from 90 days to 50 days for PSPs. Further, the clearance of Inter-State Aspects is not required for PSPs.**
- (vii) Ministry of Environment, Forest & Climate Change (MoEF&CC), vide its notification dated 18.05.2023, has enabled appraisal of PSPs under B2 category subject to certain conditions.**
- (viii) The MoEF&CC on 14.08.2023, has issued specific Terms of Reference (TOR) for the proposals involving off stream PSPs wherein collection of baseline data for one season (other than monsoon) is prescribed for off stream closed loop PSPs and collection of baseline data for two seasons (pre-monsoon & post-monsoon) is prescribed for off stream open loop PSPs.**
- (ix) The MOEF&CC on 20.08.2024, has extended the provisions relating to survey in the forest areas for mining projects to other development projects including hydel/PSPs.**
- (x) MOEF&CC vide letter dated 10.09.2025 has enhanced the number of boreholes for undertaking survey and explorations in the forest area for mining and developmental projects including hydel / PSPs.**