GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.3250 ANSWERED ON 20.03.2025

NTPC'S WATER MANAGEMENT STRATEGY

3250. SHRI VISHNU DAYAL RAM: SMT. SHOBHANABEN MAHENDRASINH BARAIYA: SHRI MANISH JAISWAL: SHRI BIBHU PRASAD TARAI:

Will the Minister of POWER be pleased to state:

(a) the manner in which NTPC's water management strategy aligns with India's overall sustainability goals in the power sector;

(b) whether there are specific regions or plants where NTPC has achieved the most significant water savings, if so, the details thereof; and

(c) whether there are any new policies or incentives planned to encourage other power companies to adopt similar sustainability practices, if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Ministry of Environment Forest and Climate Change (MoEF&CC) has issued Environment Protection (Amendment) Rules, 2015 vide notification dated 07th December, 2015 which specify limit for specific water consumption by Thermal Power Plants (TPPs) and further amended on 28.06.2018.

Accordingly, NTPC Ltd. has taken various initiatives towards water conservation which include Optimization of water consumption through advanced technologies and process reengineering, Implementation of robust "Water Policy", "Rainwater Harvesting Policy" and Maintaining "Zero Liquid Discharge (ZLD)" status across all the stations. The various measures/systems adopted by NTPC Ltd. for water conservation are as under: -

- i. Implementation of Zero liquid Discharge (ZLD).
- ii. High Concentrated Ash Slurry Disposal (HCSD) Systems.
- iii. Dry Fly Ash Evacuation System.
- iv. Liquid Waste Treatment Plants and Rainwater Harvesting Systems.
- v. Ash Water Recirculation System (AWRS).
- vi. Air cooled condenser (ACC) and Dry Bottom Ash Handling Systems (DBAHS) in recently awarded projects.

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(b): NTPC has installed 'Air Cooled Condenser (ACC)' at 02 Units of North Karanpura Thermal Power Plant (3x660 MW), Jharkhand commissioned on 18.01.2023 and 28.02.2024 respectively resulting in 60% reduction in water consumption in respect to Cooling Tower system. Through this, NTPC has demonstrated its commitment towards water conservation.

(c): The sustainability practices for water savings followed by NTPC are also adopted by other power generating companies such as Damodar Valley Corporation (DVC), Tehri Hydro Development Corporation of India Ltd (THDCIL), etc.

The measures taken by Government of India to encourage power generating companies to adopt sustainability practices are as under:

- Ministry of Environment Forest and Climate Change (MoEF&CC) while issuing Environment Clearances (EC) to the Thermal Power Plants (TPPs) specify limit of water consumption which are complied by the respective Thermal Power Plants.
- Govt. of India (GoI) has notified Tariff policy on 28.01.2016 wherein it is mandated that the thermal power plants including the existing plants located within 50 km radius of sewage treatment plant of Municipality/ local bodies/similar organisation shall, in the order of their closeness to sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as pass through in the tariff.

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