

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
UNSTARRED QUESTION NO.2240
ANSWERED ON 08.08.2023

STRENGTHENING OF POWER SUPPLY INFRASTRUCTURE

2240 DR. SUDHANSHU TRIVEDI:

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

- (a) the measures being taken to ensure that power supply is not hampered due to adverse weather conditions;
- (b) the initiatives being taken to ensure sturdy infrastructure, proactive maintenance and preparedness which are crucial to meet any disaster; and
- (c) the new technologies being adopted that can mitigate the impact of such events on the power supply?

A N S W E R

THE MINISTER OF POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) : The following steps have been taken to ensure the unhampered power supply during the summer months:

- (i) Measures have been taken to ensure the maximum availability of the generation capacity. The generators shall complete the maintenance work of their plants well before the period of high demand.
- (ii) Monitoring and Coordination with Ministries of Coal and Railways on a regular basis for increasing the production and dispatch of coal as much as possible.
- (iii) All generators have been asked for timely import of Coal for blending purposes so that adequate coal stock is maintained in the plant.
- (iv) All captive coal blocks have been asked to maximize the coal production to supplement the coal supply from domestic coal companies.
- (v) Additional arrangement of gas for running gas-based stations has been planned from GAIL, during high power demand months.
- (vi) The Electricity Amendment Rule, 2022 has been notified on 29th December 2022 which mandate preparation of Resource Adequacy plan so as to successfully meet the power demand of the consumers.

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- (vii) Imported Coal Based (ICB) plants have been issued statutory directions under Section 11 of Electricity Act to stock coal and generate power during high demand period.
- (viii) Reservoir level of Hydro Stations are being monitored for optimum utilization of water. All hydro plants have been instructed to operate in consultation with Regional Load Dispatch Centre (RLDCs) / State Load Dispatch Centre (SLDCs) to optimize water utilization in current month for better availability in next month.

The details of power supply in terms of Energy Requirement and Energy Supplied and peak demand and peak met for the last 3 years and the current year are given at **Annexure**.

(b) & (c): Following measures/ initiatives have been / are being taken by Government of India to mitigate the impact of disaster related events on the power supply:

(i) Ministry of Power has prepared the “Disaster Management Plan” for power sector under the provisions of section 37 of the Disaster Management Act, 2005. The plan addresses the emergencies arising due to occurrence of natural hazards such as earthquakes, cyclones, floods, etc. The plan is revised on a regular basis to keep it abreast with the new challenges and issues coming up with changing times. Central Electricity Authority (CEA) has published Disaster Management Plan for Power Sector in 2022 enumerating measures required to be taken by Generation, Transmission and Distribution Utilities for Mitigation, Preparedness, Response and Recovery from disasters.

(ii) The following provisions for disaster resilience of the system have been provided under Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022 and Central Electricity Authority (Grid Standards) Regulations, 2010:

- (a) In coastal areas underground cables shall be used.
 - (b) Emergency Restoration System (ERS) for restoration of transmission lines of 400 kV and 220 kV lines in order to minimise the outage time of the transmission lines in case of tower failures.
 - (c) Gas Insulated Sub- station shall be constructed in seismic prone areas, coastal areas, high altitude areas, very heavily polluted areas etc.
 - (d) Aerial Bunched Cables (ABC) or Insulated Cables or covered conductor shall be used in the congested and accident-prone areas.
 - (e) Wherever required, the vehicle mounted mobile sub-station comprising of trailer, incoming and outgoing high voltage and low voltage gas insulated or hybrid switchgears, power transformer, and associated connectors etc. shall be considered for putting into immediate service to resume power supply in short time in case of emergency or disaster.
- (iii) To avoid disasters and loss of manpower, an advisory for implementation of Early Warning System (EWS) in all Vulnerable Hydro Electric Projects in upper reaches of Himalayan region was issued by the Ministry of Power. EWS has been implemented by most of the Hydro projects which has minimized the damage to manpower and equipment.

(iv) Disaster Resource Inventory for Power Sector (DRIPS) Portal provides an electronic inventory of disaster resources for power sector, so that the affected States/Organizations can readily see the availability of resources across the country and take quick decisions for requisitioning these resources for mitigating the impact of disaster.

(v) A Task Force on “Cyclone Resilient Robust Electricity Transmission and Distribution Infrastructure in the Coastal Areas” was constituted by Central Electricity Authority. All States and UTs having coastal areas have been requested to mark out the cyclone prone zones and follow the design parameters laid down in the report of the Task Force for new construction / reconstruction of the transmission lines in the cyclone prone areas.

(vi) The Government of India has launched Revamped Distribution Sector Scheme (RDSS) in July 2021 with the objective of improving the quality and reliability of power supply to consumers with an outlay of Rs.3,03,758 crore and an estimated Gross Budgetary Support (GBS) of Rs.97,631 crore from the Central Government. Under the scheme, financial assistance is being provided to the DISCOMs for upgradation of distribution infrastructure and system modernization which would strengthen the distribution system and make them disaster resilient.

ANNEXURE**ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED
QUESTION NO. 2240 ANSWERED IN THE RAJYA SABHA ON 08.08.2023***********

The details of power supply in terms of Energy Requirement and Energy Supplied in terms of peak demand

Year	Energy Requirement	Energy Supplied	Energy Not Supplied	
	(MU)	(MU)	(MU)	(%)
2020-21	1,275,534	1,270,663	4,871	0.4
2021-22	1,379,812	1,374,024	5,787	0.4
2022-23	15,11,847	15,04,264	7,583	0.5
2023-24 (upto June, 2023)	4,10,519	4,09,622	896	0.2

The details of power supply in terms of Energy Requirement and Energy Supplied in terms of peak met

Year	Peak Demand	Peak Met	Demand Not Met	
	(MW)	(MW)	(MW)	%
2020-21	190,198	189,395	802	0.4
2021-22	203,014	200,539	2,475	1.2
2022-23	2,15,888	2,07,231	8,657	4.0
2023-24 (upto June, 2023)	2,24,106	2,23,292	814	0.4
