GOVERNMENT OF INDIA MINISTRY OF POWER LOK SABHA UNSTARRED QUESTION NO.688 ANSWERED ON 28.11.2024

NATIONAL ELECTRICITY PLAN

688. SHRI YOGENDER CHANDOLIA: SHRI JANARDAN MISHRA:

Will the Minister of POWER be pleased to state:

- (a) the details of the National Electricity Plan:
- (b) the target of energy capacity to be achieved by 2032 under the said plan; and
- (c) the role of power sector in this regard?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a): Section 3(4) of Electricity Act, 2003 stipulates that, the Central Electricity Authority (CEA) shall prepare a National Electricity Plan in accordance with the National Electricity Policy and notify such plan once in five years.

2. National Electricity Plan is a short-term framework of five years while giving a 15year perspective and includes:

a) Short-term and long-term demand forecast for different regions;

b) Suggested areas/locations for capacity additions in generation and transmission keeping in view the economics of generation and transmission, losses in the system, load-centre requirements, grid stability, security of supply, quality of power including voltage profile etc. and environmental considerations including rehabilitation and resettlement;

c) Integration of such possible locations with transmission system and development of national grid including type of transmission systems and requirement of redundancies;

d) Different technologies available for efficient generation, transmission and distribution; and

e) Fuel choices based on economy, energy security and environmental considerations.

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3. While developing the National Electricity Plan, CEA consults all the stakeholders including State Governments and domain experts in the field of demand forecasting.

4. CEA has been preparing NEP from time to time covering detailed and perspective plans for different time periods. The fourth National Electricity Plan prepared by CEA includes a review of the period 2017-22, detailed capacity addition requirement during the years 2022-27 and Perspective Plan projections for the years 2027-32.

(b) & (c): As per the National Electricity Plan (Volume I: Generation), to meet the projected peak demand of 366.4 GW and energy requirement of 2473.8 BU (as per 20th Electric Power Survey) of the country, the installed Capacity for the year 2031-32 is likely to be 900,422 MW, which comprises of 304,147 MW of conventional capacity (Coal-259,643 MW, Gas-24,824 MW, Nuclear-19,680 MW) and 596,275 MW of Renewable based Capacity (Large Hydro-62,178 MW, Solar-364,566MW, Wind-121,895 MW, Small Hydro-5450 MW, Biomass-15,500 MW, PSP-26,686 MW; excluding 5856 MW of likely Hydro based Imports) along with BESS capacity of 47,244 MW/236,220 MWh.

2. To achieve the above targets, Government is taking requisite steps for addition of generation capacity in a time bound manner.
