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 15-year 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.
