GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.2696 ANSWERED ON 24.03.2025

INITIATIVES REGARDING NATIONAL ELECTRICITY PLAN

2696 DR. K. LAXMAN:

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

- (a) the key objectives of the National Electricity Plan (2023-2032), and manner in which it will support country's future power demand of 458 GW by 2032;
- (b) the role nine new High Voltage Direct Current (HVDC) lines will play in strengthening country's power infrastructure;
- (c) manner in which the inter-regional transfer capacity expansion from 119 GW to 168 GW will improve power distribution across States; and
- (d) the ways in which the National Electricity Plan will facilitate renewable energy integration and green hydrogen adoption into the grid?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

- (a): The National Electricity Plan-Transmission outlines the transmission system required to be added in the country during the period 2023 to 2032, commensurate with the generation capacity addition and growth of electricity demand in the country. The transmission plan includes the addition of central and state transmission systems (220 kV level and above) to meet the projected peak electricity demand of 388 Giga Watt (GW) by the year 2032.
- **(b):** High Voltage Direct Current (HVDC) lines facilitate bulk transfer of power over long distances. New HVDC lines have been primarily planned for transfer of bulk power from Renewable Energy (RE) rich areas to major load centers.
- (c): Resources for electricity generation are unevenly distributed across the country. Some states have huge variable RE potential while some states are rich in hydro potential. The increase in Inter-Regional transfer capacity from 119 GW to 168 GW by 2032 would facilitate seamless transfer of power from power surplus regions/states to power deficit regions/states, thereby helping the states to meet their electricity demand.
- (d): The National Electricity Plan -Transmission, inter-alia, outlines the transmission system for evacuation of power from major RE potential Zones/ areas. Further, transmission system has also been planned for delivery of power to the Green Hydrogen/Green Ammonia manufacturing potential hubs in the country. The transmission projects associated with integration of RE and for delivery of power to Green Hydrogen manufacturing hubs are under different stages of implementation.
