GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.1276 ANSWERED ON 10.03.2025

REPORTS ON THE STRENGTH OF HIGH TENSION ELECTRIC POWER POLES AND WIRES

1276 DR. AJEET MADHAVRAO GOPCHADE:

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

- (a) whether Government is aware of the incidents involving the collapse of high tension electric power poles and wires in the country;
- (b) the actions that have been taken so far by the Central Government, in collaboration with State Governments of Maharashtra and Gujarat, to regularly assess the integrity of high tension electric power poles and wires, given the incidents of collapse in these States; and
- (c) the reasons for not requiring electrical companies to submit reports on the strength of high tension electric power poles and wires?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) to (c): As per Electricity Act 2003, distribution of electricity is a licensed activity and it is the duty of the respective distribution licensee to develop and maintain an efficient, safe and economical distribution system in its area of supply. Hence, it is the responsibility of the distribution utilities to take measures required for operation and maintenance of distribution system including checking the strength of poles/ wires of High Tension (HT)/ Low Tension (LT) lines to maintain quality and reliable power supply in its area of operation.

CEA (Measures relating to Safety and Electric Supply) Regulations, 2023, specify safety measures for construction, operation and maintenance of power stations, sub-stations, transmission and distribution lines. The Regulations lay down the safety measures required for electrical installations, overhead lines etc. in the country including the States of Gujarat and Maharashtra. These Regulations are applicable to all electrical installations, encompassing electrical plants, electric lines, and individuals or entities involved in activities such as electricity generation, transmission, distribution, supply or consumption. The steps taken by State of Gujarat and Maharashtra are enclosed at **Annexure.**

....2.

Further, CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022, have provisions for strengthening of poles/ wires in disaster prone areas/ coastal areas:

- i. In coastal areas, higher strength poles like rail poles or spun poles are to be used or underground cables are to be used.
- ii. Suitable insulating paint shall preferably be provided on bare conductors in coastal areas to prevent corrosion.

CEA also prepared "Report of Task Force on Cyclone Resilient Robust Electricity Transmission and Distribution (T&D) Infrastructure in Coastal Area" in May, 2021, which was circulated to all the States by Ministry of Power in June, 2021, for taking measures suggested in the Report and to deal with and minimize the impact of cyclones.

ANNEXURE REFERRED IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO.1276 ANSWERED IN THE RAJYA SABHA ON 10.03.2025

A. Steps taken by State of Maharashtra

Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL) actively monitors and reports incidents through its field offices and undertakes necessary remedial measures to ensure the stability and reliability of power infrastructure. Regular reviews are conducted, and corrective actions are taken to minimize disruptions and risks. The State Government through MSEDCL has implemented multiple measures to regularly assess the integrity of high-tension electric Power infrastructure. The following steps have been taken in Maharashtra:

- i. Periodic Inspections: MSEDCL conducts routine inspections and maintenance of power poles and distribution lines to identify and rectify potential weaknesses.
- ii. Structural Strengthening: Replacement of aging and weak poles with stronger, corrosion-resistant alternatives to enhance durability and stability.
- iii. Preventive Maintenance: Regular maintenance activities, including tightening of sagging wires, tree trimming to prevent contact, and proactive reinforcement of poles in vulnerable areas.
- iv. Disaster Preparedness: Implementation of safety protocols and rapid response mechanisms to minimize the impact of extreme weather events on power infrastructure.
- v. Collaboration with Regulatory Bodies: MSEDCL works closely with the Maharashtra Electricity Regulatory Commission (MERC) and the Central Electricity Authority (CEA) to ensure adherence to best practices in safety and infrastructure maintenance. MSEDCL follows stringent internal protocols for infrastructure assessment and safety. Additionally, compliance with standards set by the Central Electricity Authority (CEA) and adherence to safety guidelines ensure that the power distribution network is regularly evaluated and maintained. MSEDCL submits periodic reports to MERC as part of its operational compliance and continues to implement best practices for infrastructure resilience.

B. Steps taken by State of Gujarat

As informed by Gujarat Urja Vikas Nigam Limited (GUVNL), proactive measures are taken in the State of Gujarat, such as transporting poles and wires to potential disaster sites in advance. Additionally, sufficient manpower from pole and wire erection contractors is kept ready at vulnerable locations. In the event of collapse of a high-tension electric power pole or wire, rectification measures are implemented immediately as soon as the cyclone subsides, ensuring that power supply is restored in affected areas at the earliest possible time.

Further, High Tension and Extra High-Tension lines and conductors are checked during routine patrolling, fault tripping and breakdown by utility staff, wherein, the parts of towers/ poles like cross arms, insulators, hard-wares & conductors, jumpers are checked at regular interval for its healthiness. Also, foundations, stub, members of towers/ H-frame structures are assessed and rectification is done under normal course, while stub strengthening, replacement of deteriorated structures is carried under Repair and Maintenance (R&M) plan on a yearly basis.
