GOVERNMENT OF INDIA MINISTRY OF POWER

RAJYA SABHA UNSTARRED QUESTION NO.951 ANSWERED ON 28.07.2025

STELLAR BY CENTRAL ELECTRICITY AUTHORITY

951 SMT. KIRAN CHOUDHRY:

SHRI NARAYANA KORAGAPPA:

SHRI MAYANKKUMAR NAYAK:

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

- (a) whether the State of Art Totally Indigenously Developed Resource Adequacy Model (STELLAR) has been distributed to all States and electricity distribution companies (DISCOMs);
- (b) if so, the number of State utilities and DISCOMs that have been adopted or operationalised this tool till date;
- (c) the top three States which have shown the maximum deviation between their previous resource planning models and the projections made by STELLAR, and in which manner the policy or infrastructure has been changed as a result; and
- (d) the estimated cost savings from using STELLAR for optimising generation, transmission, storage, and ancillary services?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRI SHRIPAD NAIK)

(a) to (d): The Resource Adequacy Model, STELLAR, developed by CEA is a long term capacity expansion model with demand response. The Monitoring Committee of Power System Development Fund (PSDF) in its meeting held on 13.06.2025, approved the proposal for purchase of 31 GAMS software licenses for CEA STELLAR tool with PSDF grant of ₹5.35 Cr. The tool will be made available to the States shortly.
