GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA UNSTARRED QUESTION NO.5414 ANSWERED ON 03.04.2025

DEVELOPMENT OF ADVANCED TECHNOLOGIES UNDER MAHIR

5414. SHRI MUHAMMED HAMDULLAH SAYEED:

Will the Minister of POWER be pleased to state:

- (a) whether there has been progress under the Mission on Advanced and High-Impact Research (MAHIR) in developing advanced technologies for the power sector and if so, the details thereof;
- (b) the details of the number of research projects approved under the scheme so far; and
- (c) whether the Government has plans to ensure the commercialization of the technologies developed under the said scheme and if so, the details thereof?

 A N S W E R

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

(a) & (b): "Mission on Advanced and High-Impact Research (MAHIR)" is an initiative to identify emerging technologies in the power sector and develop them indigenously, at scale, for deployment.

The Mission has a two-tier structure - a Technical Scoping Committee (TSC) to examine research proposals on technical angle and an Apex Committee to finally approve the same. Central Power Research Institute (CPRI) has been made as a nodal agency for coordinating the mission and the approved projects will be funded by the Grants provided to CPRI for R&D activities. MAHIR has made significant progress since its launch to support advanced high-impact research in power and renewable energy. A TSC was set up with experts from Academia, Utilities and Regulatory bodies to guide and evaluate research focus areas and project proposals. Priority research domains identified include:

- Alternatives to Li based Energy storage
- Geothermal energy
- Carbon capture and utilization
- Al and automation in the energy sector

Multiple consultations were held with experts, academia, and industry to refine research directions. A formal call for proposals was issued, resulting in submissions of proposals from various institutes, research organizations, academia and industry players. TSC have scrutinized the submitted proposals and have recommended 05 proposals for final consideration of Apex Committee.

(c): As per the guidelines, the Mission shall fund pilot projects of technologies developed by Indian Start-ups and also facilitate its commercialization. The Start-ups will have to share the IPR with the Government of India/CPRI.
