

Workshop on SHANTI Act, 2025: Enabling India's 100 GW Nuclear Power Roadmap through Public-Private Partnership

Posted On: 17 APR 2026 5:07PM by PIB Delhi

The Central Electricity Authority (CEA), in association with the Ministry of Power, Department of Atomic Energy (DAE), and NTPC Limited, organized a high-level workshop today at the Scope Convention Centre. The workshop focused on the operationalization of the SHANTI Act, 2025, a legislative cornerstone intended to scale India's nuclear capacity to 100 GW to ensure long-term energy security and meet Net Zero targets.



The program commenced with the ceremonial lighting of the lamp, followed by addresses from senior leaders who outlined the strategic necessity of the new legislative framework:

Ms. Seema Jain, Member (Finance), Department of Atomic Energy focused on the necessity of financial preparedness, the development of robust risk-sharing mechanisms, and the evolution of institutional frameworks to support large-scale nuclear deployment. She further underscored the importance of fostering global technological partnerships and developing innovative and financing mechanism to accelerate the growth of nuclear sector.

Shri Ghanshyam Prasad, Chairperson, CEA underscored that nuclear power is essential for providing reliable, 24/7 clean energy to support India's growing demand while simultaneously meeting international climate commitments. He further emphasized the need to ensure a secure and uninterrupted supply of nuclear fuel through diversification of sources and the establishment of long-term procurement arrangements.

Shri Gurdeep Singh, CMD, NTPC, highlighted the importance of nuclear energy in the overall energy mix and emphasized the need to accelerate preparatory activities such as land identification and site studies to enable timely construction of new nuclear plants. He also underlined the need for partnerships in

technology and the supply chain. Referring to the SHANTI Act, he noted that it has opened the sector for private participation, allowing industries to consider nuclear energy as a viable clean power source.

He further emphasized that early formulation of rules and guidelines would facilitate faster progress, and stressed the importance of ensuring long-term fuel availability, maintaining safety, and achieving broader energy security objectives.

Shri Praveen Gupta, Member (E&C), CEA opened the session by emphasizing that multi-stakeholder collaboration across government, industry, and academia is vital to realizing India's ambitious nuclear energy goals.

The workshop featured extensive technical and policy deliberations across seven key areas:

1. Decoding the SHANTI Act, 2025 and fuel security: Detailed discussions were held on provisions relating to private sector participation, the graded liability framework, and the harmonization of the new act with the Electricity Act, 2003. Discussions emphasized the importance of fuel security, including domestic capability expansion and maintaining strategic reserves
2. Site Selection & Project De-risking: Experts highlighted the need for robust site selection, land acquisition, and project de-risking mechanisms. Repurposing of retiring thermal power plants and stronger coordination with states were identified as key enablers for faster capacity addition.
3. Technology Access & Deployment: Technology access and deployment were highlighted as central themes, including the need for design support institutions, streamlined approvals, and global collaborations.
4. Localisation & Skill Development: Strengthening of supply chains, localisation, and skill development emerged as critical for scaling up the nuclear programme
5. Cost, Tariff & Financing: The workshop also underlined the necessity of cost competitiveness of nuclear, with focus on tariff structures, standardization, indigenization, and innovative financing models.
6. SMR and MMR Development: The role of SMRs/MMRs was emphasized as a future pathway to address challenges of large reactors through flexible, safer, and faster deployment models.
7. Risk Management & Fuel Security: risk management frameworks, including insurance and liability mechanisms, were discussed as essential components to ensure investor confidence and sustainable sector growth

The workshop was attended by more than 150 delegates from various organisation including 19 States, Central Ministries, Departments, Regulators, Public and Private Developers, PSU/Private vendors, engineering consultancy companies, academic institution and industry associations.

NR/AP

(Release ID: 2253013) Visitor Counter : 555

Read this release in: Urdu , हिन्दी