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DAILY EDITORIAL ANALYSIS

TOPIC

DEBATE OVER NUCLEAR LIABILITY AND ENERGY POLICY IN INDIA

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Context

• The proposed amendments to key nuclear legislations which aim to address long-standing issues related to supplier liability and private sector participation in nuclear energy, have sparked debate in Parliament.

India's Nuclear Energy Scenario

- India currently generates only about 3% of its electricity from nuclear sources (8.8 GW across 24 plants), and is projected to rise to 22,480 MW by 2031–32 and 100 GW by 2047 (Nuclear Energy Mission for Viksit Bharat).
- The Union Budget 2025–26 allocated 20,000 crore for a Nuclear Energy Mission, including the development of Small Modular Reactors (SMRs) and Bharat Small Reactors (BSRs).

Nuclear Liability and Energy Policy in India: Key Legislations

- Civil Liability for Nuclear Damage Act (CLNDA), 2010: It was introduced after global precedents like Bhopal gas tragedy (1984), Fukushima nuclear disaster in 2011, and Gulf of Mexico oil spill for compensating nuclear accident victims.
 - It channels **primary liability to the operator** (typically NPCIL) and caps it at 1,500 crore.
 - It includes a **'right of recourse'** clause, allowing the operator to seek compensation from suppliers in case of defective equipment or services.
- Atomic Energy Act (AEA), 1962: It centralizes control of nuclear energy under the government, prohibiting
 private companies from operating nuclear plants.
 - It empowers the **Atomic Energy Regulatory Board (AERB)** to enforce safety standards and oversee radiation protection.

Core of the Debate

- Safety vs. Investment Trade-off: It is argued that diluting supplier liability could compromise safety and accountability, especially in light of past industrial disasters like Bhopal.
- **Technology Transfer and Strategic Risks:** Concerns persist over technology transfer from foreign suppliers, especially in strategic areas like SMRs.
 - Private companies may be reluctant to share proprietary designs, and national security implications remain a sensitive issue.
- **Supplier Liability:** India's CLNDA uniquely includes supplier liability, allowing operators to seek compensation from equipment suppliers in case of accidents.
 - However, the Convention on Supplementary Compensation (CSC) channels liability solely to the operator.
- Legislative Ambiguity and Delays: The Jaitapur Nuclear Power Project, slated to be the world's largest, has been stalled for over a decade due to unresolved liability issues.
- Closed Nuclear Model and Private Sector Exclusion: Amendments in 2015 to AEA 1962 allowed joint ventures with PSUs, however, direct private sector participation remains prohibited, slowing capacity expansion and technological adoption.

Proposed Amendments

 The government has constituted committees to explore amendments to both Civil Liability for Nuclear Damage Act (CLNDA), 2010 and Atomic Energy Act (AEA), 1962, aiming to allow private sector participation in reactor construction and operation.



• These changes are expected to align India's laws with international norms, particularly the Convention on Supplementary Compensation (CSC), which India ratified in 2016.

Conclusion

- The debate over nuclear liability and energy policy in India touches on questions of public safety, strategic autonomy, and environmental responsibility.
- As Parliament prepares to deliberate these amendments, the outcome aims to shape India's energy future and its place in the global nuclear order.

Source: TH

Mains Practice Question

Q. Evaluate the impact of India's nuclear liability legislation on its energy policy. How does it influence India's ability to attract investment, ensure safety, and meet its long-term energy goals?



