India's nuclear watchdog criticized

Board on 'very tenuous ground' as rule-maker and enforcer, performance audit finds.

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India's nuclear regulator has received harsh criticism from the country's main auditing institution, in a report (available at go.nature.com/srxnu3) that will provide fresh ammunition to opponents of the construction of nuclear reactors in Kudankulam and elsewhere in India.

The report, submitted to Parliament by the Comptroller and Auditor General of India last week, slams the Atomic Energy Regulatory Board (AERB) — which oversees India's 22 operating nuclear plants and other radiation sources — for its lack of independence and lax oversight, and urges the government to create a nuclear regulator that is "empowered and independent" to avoid an accident like the Fukushima Daiichi nuclear disaster in Japan in March 2011.



Opponents of the Kudankulam Nuclear Power Plant are likely to seize on a government report's criticisms of India's nuclear regulator.

In the present framework, the report says, the legal status of the AERB is "one of a subordinate office executing delegated functions of the Central Government and not that of a regulator". It has no power to make rules, enforce compliance or impose penalties. Despite being the regulator of nuclear power generation, the AERB has no direct role in radiological surveillance of nuclear power plants to ensure the safety of workers, or in emergency-preparedness exercises carried out by plant operators. None of the country's nuclear power plants or research reactors, according to the report, has decommissioning

Some of these shortcomings may be attributed to the AERB's lack of autonomy, but others are the fault of the regulator itself. For instance, the auditor faults the AERB for still having no finalized safety policy, nearly three decades after its creation. Twenty-seven of the 168 safety manuals it was supposed to prepare since 1983 for the country have yet to be published.

plans in place, and the AERB has no role in decommissioning besides prescribing relevant guides and safety manuals.

The auditor also observes that the AERB has "been slow to adopt" international benchmarks for nuclear safety and has not undergone external peer review by the International Atomic Energy Agency. And the auditors note "a substantial number of radiation facilities operating without valid licences" — as of March 2012, about 91% of the more than 57,000 medical X-ray facilities operating in the country had no registration and were thus out of the AERB's regulatory control, while the agency had not inspected 85% of industrial radiography and radiotherapy units, despite the high potential of such facilities for radiation hazard. The AERB also does not have detailed records for all radiation sources used in India's medical and research facilities, nor a protocol to ensure that sources are disposed of safely.

The auditor concludes that "it is evident that AERB is on a very tenuous ground if it has to be judged in terms of benchmarks of what is expected of an independent regulator".

R. Bhattacharya, AERB secretary, will not comment on the report while it is under consideration by Parliament. But Swapnesh Malhotra, a spokesman for the Department of Atomic Energy, says that a bill to create an independent nuclear regulatory agency, now before Parliament, would deal with all of the auditor's concerns. Adinarayana Gopalakrishnan, former chairman of the AERB, however, says that the agency created by the bill will still not be sufficiently autonomous.

Welcoming the report in a statement on its website, the People's Movement Against Nuclear Energy, which is spearheading the protests against the Kudankulam Nuclear Power Plant, called for closure of the AERB and a moratorium on all nuclear activity in India.

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