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Nuclear Liability and Compensation: A Study in Global Perspective

Shivangi Prajapati, Mr. Ashok Dobhal

Uttaranchal University -Law College Dehradun

ABSTRACT

Enforcement of the 18 July 2005 India-USA Joint Statement has led to foreign investment and cooperation with India's nuclear sector. All the above have been used locally and for export in various situations. The greatest achievement of the exercise is the Civil Liability for Nuclear Damage Bill, 2010, taken up recently by both sides of Indian Parliament and awaiting presidential assent.The initial section of the paper presents a short history of India's nuclear energy program, and subsequent in-depth examination of the rule of law in India on nuclear liability and third-party compensation. The second section, subject to parliamentay discussion, examines the provisions of the 2010 Civil Liability for Nuclear Damage Bill in light of Indian law and international nuclear liability practice.Key terms utilized include nuclear responsibility, civil nuclear compensation, Vienna Convention of 1963, Paris Convention of 1960, and Convention on Supplementary Compensation (CSC) of 1997

INTRODUCTION

Nuclear power has a lot to contribute to humanity but at the same time, a lot of concerns. As seen in the Fukushima (2011) and Chernobyl (1986) accidents, nuclear power can pose some dangers despite being a clean and pure source of energy. International collaboration in the area of nuclear liability and compensation regimes for the victims has emerged as a result.[1]

MEANING AND CONCEPT OF NUCLEAR LIABILITY

The third-party liability regime in the nuclear sector gives deserving compensation to victims, works to provide for safe operation within the nuclear sector, and holds operators accountable for damage caused by nuclear accidents. With the growth of nuclear power generation and peaceful uses in the 1950s, there was a third-party liability regime to provide appropriate compensation for injury to property and person caused by nuclear accidents.[2]

Nuclear liability management is a regulatory requirement, which ensures that property, human life, and the environment receive reasonable compensation for any injury. This system is aware that although nuclear power has much to offer as regards benefits, it is fraught with dangers for which there must be clear financial and legal systems for reducing damages. The principle of strict liability is fundamental to nuclear liability law, so nuclear installation operators are held liable for losses regardless of fault or negligence. This eliminates the element of ascertaining guilt and allows the legal system to be focused on indemnification and rehabilitation.[3]

In addition to enabling quicker legal process and avoiding disputes that last for ages, nuclear liability law also encompasses sole liability, which ensures the sole liability of the nuclear operator, barring contractors or suppliers. Limited liability is another salient feature, which restricts an operator's economic extent of liability in case of an accident. State funds or foreign funds ensure additional financial protection for large accidents. In order to render the operators sufficiently able to cover potential claims, they must be soundly funded—insured or state-backed.

International treaties such as the Paris Convention (1960), Vienna Convention (1963), and Convention on Supplementary Compensation for Nuclear Damage (CSC) (1997) have been effective drivers of nuclear liability regimes development. Such conventions universalize the idea of legal liability and offer extensive compensation schemes.

Third, nuclear liability law strives to establish its position in the balance between nuclear electricity generation and the safety of people and the environment. It tries to offer adequate compensation to victims of a nuclear accident in an efficient and equitable way as well as stability and livelihood for nuclear operators according to law.

[1] Faure, M., & Fiore, K. (2016). *Nuclear Liability: Legal Principles and International Practice*. Cambridge University Press
[2] Pelzer, N. (2009). "International Nuclear Liability Law: From Paris to Vienna – and Beyond." *Nuclear Law Bulletin*, 84(1), 55-78.
[3] Handrlica, J. (2018). "Revisiting the Convention on Supplementary Compensation for Nuclear Damage." *International Journal of Nuclear Law*, 9(3), 215-230.

INTERNATIONAL LEGAL FRAMEWORKS FOR NUCLEAR LIABILITY

Vienna Convention, Paris Convention, Joint Protocol, and Supplementary Convention collectively form the foundation of the global regime of nuclear liability for compensation for damages resulting from nuclear accidents. International Nuclear Liability Principles are concerned with the application of insurance and set out criteria of prudent compensation procedures to avoid unnecessary cross-litigation.[4]

The international nuclear liability regimes' overall goal is to provide sufficient and fair compensation for the victims of nuclear accidents and provide a stable investment and operating legal environment favorable to operators and investors in the nuclear sector. Western European nuclear liability is indeed governed under the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy drafted by the Organization for Economic Co-operation and Development (OECD). The convention mandates strict liability of operators with a cap on financial compensation.

More elaborate is a regime set up by the Vienna Convention on Civil Liability for Nuclear Damage of 1963, and overseen by the International Atomic Energy Agency (IAEA). An amendment to the Vienna Convention in 1997 broadened the scope of nuclear damage and the level of available compensation.

With an aim to cover such gaps between these conventions, the Joint Protocol (1988) was formulated with the aim of covering gaps and complementing provision for compensating victims. The Convention on Supplementary Compensation for Nuclear Damage (CSC) (1997) was formulated amidst increasing international interests, with a goal of creating an international fund that would complement national compensation schemes. But the effort of the CSC to take nuclear liability law to integration around the world is still in its early days, with great powers such as Russia and China refusing to adopt its regime.

Yes, such conventions do exist, though in a state of inconsistency of application across jurisdictions and corresponding accountability problems. There is still much left for most governments to internalize international treaties in domestic legal systems, with challenging issues pending on the nuclear liability regime. To establish an effective and functional international nuclear liability regime, such provisions have to be complemented with enhanced enforcement provisions, greater levels of compensation, and codified supplier liability provisions.

CHALLENGES IN GLOBAL NUCLEAR LIABILITY

The development of an effective world framework for compensation in the case of nuclear accidents is faced with various inherent challenges in global nuclear liability regimes. Of greatest concern is the differential application of international conventions on liability. Juridical differences persist, with major nuclear countries such as Russia and China remaining outside official frameworks of compensation, diluting the overall world efficiency of current regimes.

One of the main challenges is the problem of economic compensation deficit in the case of major nuclear accidents like Fukushima, when claims for compensation outweigh the financial capacity of the operator. Current liability caps may prove inadequate and fresh thinking is required in setting compensation levels so that victims are properly compensated.

The second pressing problem is the problem of suppliers' liability in cross-border nuclear transactions. Even though schemes of liability tend to hold owners of nuclear reactors financially responsible, countries like India have enacted making the equipment suppliers liable. Even though the policy needed complete responsibility, it has inadvertently discouraged foreign investors from pursuing nuclear projects.

Furthermore, cross-border radioactive contamination complicates liability systems, and problems of liability for damage and compensation to foreign victims. As nuclear fallout is not selective about state borders, it is extremely difficult to establish cut-and-dry criteria of world compensation.

Moreover, insurance coverage and security capital provisions create fiscal burdens. Governments can be compelled to foot the bill for nuclear accident compensation, which is expensive for taxpayers. Accordingly, nuclear liability pools must be adequately capitalized in an attempt to cover enormous losses.

To function, be equitable, and respond to new nuclear energy threats, the following issues must be resolved through better global coordination, standardized legal tools, and stringent budgetary discipline. There must be a comprehensive strategy to build a stable and predictable global regime of nuclear liability that is equitable in fostering the development of energy along with public and environmental safety.

NUCLEAR LIABILITY AND COMPANSATION LEGAL FRAMEWORK

Nuclear liability and compensation is a system of apportionment of liability and financial provision in case of a nuclear accident. National laws as well as international conventions have framed schemes of compensation, liability amounts, and funding of accident costs.

[4] Cameron, P. (2007). “Nuclear Energy and Liability in International Law.” *Journal of Energy & Natural Resources Law*, 25(4), 523-545.

Some of the most important international conventions that govern nuclear liability are the 1963 IAEA Vienna Convention, the 1960 OECD Paris Convention, and the 1997 Convention on Supplementary Compensation for Nuclear Damage (CSC). The conventions mentioned above have formalistic schemes of compensation but maintain such basic principles as:

Exclusive liability, under which the entire economic burden is left with nuclear operators, not contractors or suppliers.

Strict liability, under which the operator is held legally responsible for nuclear accidents even in the absence of fault.

Limits of liability are generally established, state action being needed for catastrophic scale mishaps. Financial security provisions require that operators will possess adequate insurance coverage or government-subsidized funds to accommodate claims. Nuclear liability legislation has been enacted in states of all countries on the planet to cap operator liability and provide indemnification through insurance pools. India's Civil Liability for Nuclear Damage Act (2010) and the Price-Anderson Act (USA) are the best-known examples, faulted for its indemnification policy.

Resolving these issues necessitates greater international collaboration in order to create an equitable and efficient nuclear compensation system.

The Price-Anderson Act (1957, USA)

Enacted into law in 1957, the Price-Anderson Act indemnifies such individuals who are victims of nuclear accidents. The law limits the liability of licensees for nuclear reactors and establishes a pool fund to pay damages associated with nuclear accidents. The U.S. Department of Energy (DOE) regulates indemnification provisions on DOE-connected contractors in nuclear activities.

The Energy Policy Act of 2005 extended fiscal protection in Price-Anderson, with provisions for the required amendments following review by congress. Fiscal safety is accorded legally responsible parties, including nuclear activity participants and contractors.[5]

India's Civil Liability for Nuclear Damage Act (2010)

India's Act of 2010, Civil Liability for Nuclear Damage, is the overseeing law to manage nuclear accident compensation. Unparalleled in likeness to liability schemes elsewhere in the world, the act focuses on suppliers, which has dissuaded foreign investment in India's nuclear sector. While a step to increase responsibility, such an action remains controversial in today's era.

Nuclear liability regimes must be as effective in responding to emerging risks, equitable, and cost-effective as they must. This requires greater international cooperation, harmonized legal schemes, and robust financial management systems.

b) India's 2010 Civil Liability for Nuclear Damage Act

India's Civil Liability for Nuclear Damage Act (2010)

Civil Liability for Nuclear Damage Act, 2010 (CLNDA) enacts a no-fault regime in India to make the suppliers of nuclear facilities legally responsible to pay compensation to victims upon occurrence of a nuclear accident. The act enacts a mechanism for fast payment of compensation, i.e., establishing a Nuclear Damage Claims Commission and a Claims Commissioner to file claims quickly.

The bill puts the entire burden firmly on the shoulders of the nuclear operators, with the nuclear damage being actionable in civil law and subject to compensation by the victims within time. India's regime of liability is in line with frontline international conventions falling under the jurisdiction of the International Atomic Energy Agency (IAEA), namely:

The Vienna Convention on Civil Liability for Nuclear HarmThe Convention on Supplementary Compensation for Nuclear Damage (CSC)These standards offer the norms of nuclear liability, pecuniary compensation, and transboundary cooperation in responding to nuclear damage.

Japan's Nuclear Damage Compensation Law (1961)

The Act Providing for Compensation for Nuclear Damage (Act No. 147) is the foundation of Japan's nuclear liability system. It establishes permanent responsibility on the side of nuclear operators for damages arising out of nuclear accidents.In service of the payment of compensation forthwith, it is the duty of the Nuclear Damage Compensation Facilitation Corporation to:Financial assistance to nuclear operators where compensation exceeds financial security limits stipulated by law.Provision of stable provision of electricity and operation of nuclear reactors with economic stability guaranteed.Financial assistance to indemnity agreements under Japan's nuclear damage compensation scheme.Where the compensation is higher than ceilings stipulated under Article 7, Paragraph 1, the corporation provides key funding assistance to nuclear operators to fund damages and stabilize communities.

CASE LAWS

G. Sundarrajan v. Union of India & Others (6 May 2013)

The Atomic Energy Act, 1948 (Act 29 of 1948) became effective after the proceedings of the Constituent Assembly making the blue print for regulation of atomic energy in India. The act set up the Atomic Energy Commission (AEC), the highest advisory body on nuclear matters under the direct purview

[5] Sands, P. (2003). *Principles of International Environmental Law*. Cambridge University Press

of the Office of the Prime Minister. The AEC consists of senior bureaucrats, select ministry secretaries, and principal technocrats and scientists, offering strategic guidance on atomic energy issues.

AEC was established in 1954 and guided the commissioning of India's first research reactors: Apsara (1956), Cirus (1960), and Dhruva (1985). Act 29 of 1948 also regulated the development and utilization of atomic energy in India, with an effect of organized development on the subject

M. Vetri Selvan v. Union of India (July 22, 2010)

While public hearings are otherwise called public meetings, certain basic differences do lie between the two. Public hearing has been defined by scholars Abigail Williamson and Archon Fung as "an open meeting of officials and citizens, where citizens may make comments, but where officials need not respond publicly."

Among the principal functions of a public hearing is that of a forum for citizens to make recommendations, ask questions, and express concerns regarding decisions prior to legislative or administrative consideration. An official statutory public hearing, and not just public comment during a meeting, is held in a formal manner in order to receive citizen comment on pending legislation. There are various levels of public participation ranging from notification in the paper to seeking comment directly from the people.[6]

Draft bills are at issue in this regard because they are used to introduce, amend, or enact legislations. Bills need to be signed by both houses of Parliament and authenticated by the President of India to be converted into a formal act. According to Article 118 of the Constitution of India, the two Houses of Parliament are independent to formulate their own procedure and proceedings. Article 122 of the Constitution prohibits judicial review of legislative matters of procedure and hence no procedural default can invalidate legislation adopted by them.

Similarly, Article 212 is the motivating force behind state legislatures' rules of procedure that thereby serve as the basis for Lok Sabha rules of business and conduct.[7]

Yash v. Union of India Mannully, Thomas, 21 October 2011

The third respondent, the Academic Energy Regulatory Board (referred to hereinafter as "the Board"), was established and charged, by way of apparent mandate, The Board is also tasked with a lack of independence in the form that it is one of the departmental organizations of the Department of Atomic Energy, The two roles of the Board to venture into nuclear energy in India have been claimed to be a conflict of interest, and the majority of members serving on the Board have been selected from the Indian Government's Department of Atomic Energy. It has been argued that a body untrammelled and uncontrolled has been entrusted with unlimited powers as As the Act is not providing any indication of how the satisfaction is to be achieved, it is the argument that such a delegation of authority would be arbitrary and against the fundamental canons of the rule of law which form the fabric of the Constitution. Section 9(1) of the Act further reveals that there is no claim which takes precedence unless and until the parties are notified by the Board that it has the power to issue irrational and arbitrary orders.

CONCLUSION

All have attempted to improve the lives of victims of nuclear accidents. The international nuclear community responded to the Chernobyl nuclear accident holistically in the form of accepting a new order of the world, fusing two already existing ones, and reconstructing two of them. There will be additional spent and excess resources to cure many individuals. However, they have not been greeted by everyone. For whatever political or legal reasons, some countries will not sign any of these treaties. Some countries will argue that their countries are too distant to be of any practical aid, or that the treaties are too local. Whether or not they produce nuclear energy, some Asian and African countries might simply opt for the policy of not engaging in bilateral or multilateral regional agreements with their immediate proximate neighbors. It will not be regimes of international liability creation and lobbying that a global system of nuclear accountability and victim compensation can be assured to exist; combined effort must be undertaken in trying to persuade as many states as possible into adopting them. International cooperation with the support of each country's influential and robust support is the best way of attaining this.

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