

Development of atomic energy



I. Introduction

1) An overview

There were many serious concerns such as the depletion of fossil fuels and its ill-effects such as high greenhouse emission and increase in global warming due to which a need was felt to shift to renewable sources of energy. Nuclear power was an alternative found out in search of a viable renewable source of energy which could combat the ill-effects of non-renewable sources.[1]

Although, there is no second thought that nuclear energy contains in itself the effect of Damocles' sword. Although, regardless of it, the reasons which still urged the developed and developing nations to resort to the use of nuclear energy were non-renewable sources' extinction and the non-ending human needs. But at the same time, it puts a responsibility on the nations who are using to take all the high standards and precautions to tackle any mishap.[2]

We can trace back to the time when initial legal framework to regulate atomic energy in India kick-started to the year of 1948. In 1948, the formal legal framework for regulation atomic energy was discussed upon in the constituent assembly and they came up with the legislation called as Atomic Energy Act, 1948.

Subsequently, the development and growth of the atomic energy sector with the time demanded evolved legislation. It led to the formation of the Atomic Energy Act, 1962 which replaced the previous 1948 Act. The basic functions

of the said Act were to restrict the use of the atomic energy for the welfare of the people of India as well as for other peaceful purposes.

The acts in the subsequent times went under various amendments by the central government, the crucial of which was of 1987 through which central government got the power to supply and produce electricity from the atomic energy. Further, to realise the idea of nuclear power generation, the government came up with the Nuclear Power Corporation of India (NPCIL) which was a public sector company which has the objectives of designing, building and operating of nuclear reactors.

Nevertheless, a crucial aspect which government fell short on even after bringing various amendments was to introduce any compensation or liability clause in cases of any nuclear damage resulting out of nuclear mishap. Thus, there was a need for separate legislation to deal with the nuclear liability aspect in case of any nuclear mishap and to provide compensation to victims who suffer damage due to such mishaps. In pursuance to it, the Civil Liability for Nuclear Damage Bill was introduced in the parliament which got solidified into the act in 2010.

Coming to the nuclear law, it can be defined as “ the body of special legal norms created to regulate the conduct of legal or natural persons engaged in activities related to fissionable materials, ionizing radiation and exposure to natural sources of radiation.”[3]

The basic purpose for which nuclear energy is being utilised in India is to generate electricity. Although the amount of electricity that is generated by nuclear energy in India is quite minimal, the potential it has cannot be

contested upon. Thus, in spite of its small current contribution, the fact cannot be denied that nuclear power has the potential to lead India to have energy independence and that is the very reason why its development becomes so critical[4]at the present time. But, it has its own ill-effects as well which would be dealt with in subsequent parts.

2) General Principles of Nuclear Energy

While discussing nuclear energy in general, IAEA is the most pertinent organization at the international level. India has been a member of it since its inception in 1957.[5]It was set up within the United Nations family as the world's " Atomic for peace" organization. Since IAEA came into play, it was entrusted with the responsibility to work with all of its member states and multiple other partners around the world to advocate safe, secure and peaceful use of nuclear technologies.[6]

The main task that IAEA is handed over with is to facilitate and encourage the development as well as the inspection of nuclear power.[7]Further, it has to ensure through non-proliferation safeguards that the use of nuclear energy is restricted to peaceful purposes only.[8]It also has the responsibility to set the standards to safeguard human's health and safety in consultation with other international organisations and agencies.[9]

There are some basic principles that IAEA has laid down that has to be followed by all the concerned member states so that nuclear safety and precautions are taken care of.[10]The principles are followed-

(a) The safety principle;

- (b) The security principle;
- (c) The responsibility principle;
- (d) The permission principle;
- (e) The continuous control principle;
- (f) The compensation principle;
- (g) The sustainable development principle;
- (h) The compliance principle;
- (i) The independence principle;
- (j) The transparency principle;
- (k) The international co-operation principle.

3) International conventions

When we see from the international perspective with respect to nuclear liability then there are four instruments governing the same that is the 1960 Paris Convention, 1963 Vienna Convention, 1997 Protocol to Amend Vienna Convention and 1997 Convention on Supplementary Compensation for nuclear damage. The latest edition to it which is the Convention on Supplementary Compensation (CSC) for nuclear damage was formed under the patronage of IAEA and basically deals with the nuclear liability aspect. CSC provides, to all the countries that follow the basic principles of nuclear liability, for treaty relations and compensation the nuclear damage from the

international fund in case any nuclear mishap occurs.[11]India ratified CSC in 2016.

There have been many instances in the past of nuclear debacles such as the one which happened in Chernobyl in 1986, it has made us learn that a nuclear debacle does not only affect the region it occurs but rather a wide broadening nearby states and its ecosystem as well. Moreover, the aftereffect of the nuclear fiasco remains for a long period of time. Thus, these reasons created a need to come up with a global regime which could offer damages to the victims on a uniform basis irrespective of their nationalities. Although the efforts were taken to form the same after Chernobyl debacle, there could not be any universal solidification regarding an international nuclear liability regime.

Nevertheless, regardless of a universal uniform liability regime, there are still some principles which are fundamental to most of the conventions and laws.

[12]It can be categorised as follows-

- Strict liability of the nuclear operator
- Exclusive liability of the operator of a nuclear installation
- Compensation without discrimination based on nationality, domicile or residence
- Mandatory financial coverage of the operator's liability
- Exclusive jurisdiction (only courts of the State in which the nuclear accident occurs have jurisdiction)

- Limitation of liability in amount and in time

It can be analysed from the above developments that many reformations have taken place in a short span of time with respect to evolve an international nuclear liability regime but, nevertheless, the realities depicts that they are still not sufficient to do justice to the victims.

Coming to India specifically, there are three primary sources which upholds the nuclear liability framework of India which are the Indian Nuclear Insurance pool and ratification of CSC, 1997[13] accompanied with the certain Executive Explanations of the Act and Rules of the Ministry of External Affairs.

4) Civil Liability under the Act

The Indo-US Civilian Nuclear Agreement of 2005 paved the way for the Civil Liability for Nuclear Damage Act, 2010. (Act)[14]The Act has been envisages with certain purposes such as to create a civil liability in the cases of nuclear incidents, making liable to the operators of the nuclear plants that is the Government of India and its undertaking entities rather than suppliers, to assist the victims of the said nuclear incidents in providing instance compensation[15]and to implement no-fault liability rule while providing compensation to the fatalities caused in the nuclear accidents. India also became a member of the International Convention on Nuclear Civil Liability Arena after the enactment of this act.

This Act got implemented in September, 2010 ad since its inception it has managed to be a controversial and an issue of continuous debate.[16]It is so because this legitimate effort of the government to protect rights and to

create liabilities on the concerned entity or person has backfired since it infringes many of the fundamental rights of the human beings which would be substantiated subsequently.[17]

When it comes to the accountability of the nuclear damages as well as for the liability of the said incidents, the act still remains ambiguous on many levels which could be analysed through various sections of the Act.

The sections of the Act which deal with the liability aspect have been dealt here with-

Section 4 says that the operator of nuclear installation would be liable in case of occurrence of any nuclear damage out of the nuclear installation or involving nuclear installation. Further, it states that when more than one operator is liable for the said nuclear damage then the operators would not be liable separately, be joint and several. But there has not been any authorisation of authority to have a regular check on the safety standards followed so that it can be ensured that no future nuclear accident could occur out of negligence.

Section 5 talks about certain exceptions which have been meted to the operators such as any civil war, in cases of armed conflicts, terrorism or mutiny, any hostility or a natural disaster having an exceptional character wherein operators are absolved of their liability to compensate for the damages. This very section goes against the principle of absolute liability by providing exceptions to the operators.

Section 6 which states out the recourse of the supplier has also been limited since it puts a cap on the damages which can be claimed by the operator and central government. To state it precisely, the liability of operators as well as of central government in all respects are capped at Rs 15 billion (USD 238 million) and at an equivalent of 300 million Special Drawing Rights.

Section 7 states that if the liability of a nuclear incident extends to a certain limit then the ultimate liability would be of the central government. Thus, the government of India would be liable in cases where damages exceeds Rs 500 Crore by the virtue of being the operator because as per the UN adopted Convention on Supplementary Compensation, the liability lies with the operator. So, it makes the operator of the nuclear installation liable over suppliers in the event of a mishap. And since the operator in this case is government or its entities so all payments would be indirectly coming from the taxpayers.

This clauses are quite evident that they are favouring the interest of corporate houses and nuclear supplier over the interest of individuals.

There have been many amendments in the act to make it better legislation, for instance, Section 3 used to give 15 days' limit to notify a nuclear incident from the date of occurrence with certain exceptions wherein it can be satisfied that the threat was insignificant. But now, the instance has been changed and the nuclear operators would now have to report about any "extra-ordinary nuclear event" including leakage of radioactive materials or radiations within 24 hours of occurrence and a detailed report would needed

to be filed within the span of 10 days in accordance to an order of the Atomic Energy Regulatory Board (AERB).[18]

But, however, regardless of some of the amendments brought out by the legislation, the Act still seems to be making mockery of the principle of 'polluter pays' principle and absolute liability' which were laid down by the Hon'ble Apex Court while interpreting Article-21 of the Constitution in the case of M. C. Mehta v UOI (Oleum Gas leak case).[19]

5) Civil Liability under the Rules

The Rules also came into force on 11 November, 2011 which is the same day the Act came into being.[20]The most debatable rule in the whole Civil Liability for Nuclear Damage Rules, 2011 is rule 24 which talks about "right to recourse".[21]The proviso limits the amount of damages that can be claimed as a right to recourse against the operator either to the extent of the operator's liability or the value of the contract whichever is lesser.

Rule 24 read with section 17 of the Act

The very rule of 24 of Nuclear Damage Rules, 2011 appears to be restricted to section 17 (a) of the Civil Liability for Nuclear Damage Act, 2010. And sub-sections 17 (b) and 17 (c) does not appear to be covered at all. It is so because all three sub-sections naming 17 (a), (b) and (c) are distinctive in nature and only comes into play when any of them is fulfilled. Thus, right of recourse would only kick in when it has been explicitly mentioned in the contract as stated in rule 17 (a).[22]The said rule is thus prone to more debates and controversy.

II. Constitutionality of the ACT

When we analyse Article 21 of the Constitution, it enshrines right to life which encompasses right to have a decent and healthy environment.

Anything done which is against it or disturbs it any level is deemed to be violative of Article 21.

When we acknowledge the impact a nuclear installation does to an area and its vicinity, we learn that the list of things getting effected or disturbed is endless be it to the environment, marine life, life and property of an individual, flora and fauna, our health, nuclear water disposal or so on. It directly infringes our fundamental rights such as Article 21 and 14 of the Constitution of India as well as the environmental laws.

Now, coming to the Civil Liability for Nuclear Damage Act, 2010, it lists out various exceptions to the operator[23]in cases of a nuclear debacle such as not making suppliers' liable and capping operator's financial liability. These principles violate various principles such as the ' polluter pays' principle and the ' absolute liability' principle which has been a part of our law as recognised under Article 21 of the Indian Constitution. Thus, these laws are unconstitutional.

Polluter Pays Principle, which has been claimed to be infringed above, was adopted in the Rio Declaration[24]and is an international guidelines with respect to environmental policy formation. It has been an attempt to make polluters bear the ' real' social cost. It has been adopted by Indian judiciary as part of our law.

Absoute

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1) International Atomic Energy Association safety approach in relation to The Act

As per the IAEA, "The fundamental safety objective is to protect people and the environment from harmful effects of ionizing radiation."

Safety measures include actions to prevent incidents and arrangements put in place to mitigate their consequences if they were to occur.

Ten safety principles have been formulated, on the basis of which safety requirements are developed and safety measures are to be implemented in order to achieve the fundamental safety objective. Those are-

Principle 1: Responsibility for safety

Principle 2: Role of government

Principle 3: Leadership and management for safety

Principle 4: Justification of facilities and activities

Principle 5: Optimization of protection

Principle 6: Limitation of risks to individuals

Principle 7: Protection of present and future generations

Principle 8: Prevention of accidents

Principle 9: Emergency preparedness and response

Principle 10: Protective actions to reduce existing or unregulated radiation risks

Why was it hurried due to prior visit of Obama?

SHRI GURUDAS DASGUPTA - No need with another legislation when the strict and absolute liability already there.

Concern about section 17 of the Act

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