

Legal Analysis of the Korea Radioactive Waste Management Act in the aspect of IAEA Principles

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1. Introduction

According to the Principles of Radioactive Waste Management, the IAEA SAFETY SERIES NO-111-F, IAEA declared 9 doctrines. The IAEA advised a country that operates nuclear power plant to adopt the principles. As a member of the IAEA, Korea has also discussed about a unified policy and enacting law for radioactive waste management to follow the doctrines. This study analyzed the recently enacted Korea Radioactive Waste Management Act and verified whether the Act successfully follows the doctrine or not.

2. The IAEA Principles of Radioactive Waste Management

The IAEA management guideline for radioactive waste is to deal with radioactive waste in a manner that protects human health and the environment now and in the future without imposing undue burdens on future generations. From the concept first IAEA principles is 'Protection of human health'. It means that radioactive waste shall be managed in such a way as to secure an acceptable level of protection for human rights. Also the management shall provide an acceptable level of protection of the environment as a principle of environmental protection (Principle 2). Moreover the IAEA considered matters of protection beyond national borders. Domestic radioactive waste management should assure global environmental and human health effects (Principle 3). Because of radioactive waste's prolonged harm to earth creatures, the IAEA considered the safety of future generations. Radioactive waste shall be managed in such a way that predicted impacts on the health of future generations will not be greater than relevant levels of impacts that are acceptable today and shall not impose undue burdens on future generations (Principle 4, 5). The IAEA recommended on independent legal framework of regulatory functions to guarantee appropriate responsibility and monitoring (Principle 6). Technical guidelines of the management are also suggested by the IAEA. Generation of radioactive waste shall be kept to the minimum practicable and interdependencies among all steps in radioactive waste generation and management shall be appropriately taken into account (Principle 7, 8). Lastly facilities of the management shall be safe during their lifetime (Principle 9).

3. The Korea Radioactive Waste Management Act

The Act was promulgated under the Korea law and codes No 9016 in March 28, 08 and enforced in beginning of this year 2009. Before enacting this Act, nuclear waste codes and regulations were not unified laws because Korea Atomic Energy Law and other diverse regulations prescribed the issues.

Purpose of the Act is to unify the scattered radioactive waste laws and codes to build a systemized and effective policy to the management of radioactive waste. One of the important reasons for enacting the Act is to supply legal grounds to the establishment of the Korea Radioactive waste Management Cooperation and special funds for supplying monetary resources to the management body.

3.1 Structure and main contents of the Act

The Act consists of 45 clauses. Chapter 1 treated general rules of management. Under the chapter 1 management cooperation and nuclear waste maker shall be liable for the waste under 'Polluters pays doctrine'. So polluters such as nuclear power plant operator or radioactive industry cooperation shall be charged certain fees for radioactive waste management. The chapter also defined management of radioactive waste broadly as follow;

"Taking over radioactive waste from the waste maker, and then delivery, storage, disposal process and all related activity"

From the definition, the Act prescribes and gives a unified legal guide on all issues of the processes with eliminating conflicting codes and laws of other nuclear laws.

In Chapter 2, the Act clearly burdens to the Korea government, especially Ministry of Knowledge Economy, for making a stable and future policy and plan to the waste. The Ministry shall be required to cooperate with the Nuclear energy committee for reviewing and decision making processes under the Chapter 2.

Spent nuclear fuel management fee shall be charged to Nuclear power plant operator and advance payment schedule for construct nuclear waste facilities, and

mandatory deposit of dismantling cost are prescribed at chapter 3.

Korea Radioactive waste Management Cooperation (KRMC) is a delegated authority for the waste management from government under chapter 4 of the Act. Purpose and use of the special management fund of radioactive waste, and administrator of the fund are based on chapter 5 of the Act.

3.2 President Regulation of the Act

President regulation as a supplementary law to execute the Act enforced in January 1, 2009. Main contents of the regulation supply concrete procedure of radioactive waste delivery and levying radioactive waste management cost and fees. Formation, work, and authority of the radioactive waste management committee are explained in this regulation.

4. Legal analysis of the Korea Radioactive Waste Management Act in the aspect of the IAEA Principles

Though the IAEA principles are not codes or regulations that member countries shall follow or adopt as a domestic law the principles are good legal source of evaluating whether domestic law keeps international standards or not. It means that legal analyzing and comparing process between the Principles and member country's domestic radioactive waste law are necessary processes for promoting international safety against radioactive waste.

As a single unified nuclear waste law, the Korea Radioactive Waste Management Act tried to include all of the IAEA principles. § 1 of the Act clearly declared that purpose of the Act is to guarantee safety of human being and environment against radioactive waste. Concerns of the IAEA principle 1 and 2 are involved here. § 5 of the Act, responsibility of radioactive waste maker and management, adopted IAEA principles 7 and 8, so that the waste maker and management body shall minimize production of radioactive waste and keep close relationship with each other from production process to depositing to ground. § 16 and §17 of the Act make a possible to charge advance payment of spent nuclear fuel and nuclear waste management fees and costs with mandatory deposit duty of dismantling cost for nuclear power plant. These efforts clearly show that the Act mitigates burden to future generation under IAEA Principle 5.

However IAEA principle 3 'safety of beyond a country border' and 9 'prolonged safety of a facility' were not clearly stated in the Act. Cross border matters may have been treated in the Korea Nuclear Compensation Act and concrete technical guide of a facility safety shall be prescribed in the supplementary order and ordinance of the Act. Moreover IAEA

principle 6 requires that a regulatory body and a management office shall be independent from each other. From the aspect, the Act did not interrupt any authority of the Korea Institute of Nuclear Safety (KINS). Its' authority has been awarded under the Korea Atomic Energy Law and the KINS Law.

4.1 Drawback of the Act

As I mentioned before, though the Act adopted IAEA principles, the Act itself is silent about safety regulatory body and power of it. The Act only empowered control authority of radioactive waste management and operation to Ministry of Knowledge Economy that does not a regulatory body in nuclear field. From the point of view that unifying laws and codes related with radioactive waste is one of the main purposes of the Act, it will become a more perfect law if the Act prescribes the monitoring and inspection power of a regulatory body such as the KINS or other regulatory government entity.

Someone may insist that the KINS, Korea nuclear regulatory entity, is already an empowered regulatory power by the Korea Atomic Energy Law, so the Act needs not to include the entity's authority.

However considering the enacting purpose of the Act, that is, unifying all legal matters and issues into the Act, regulatory authority to radioactive waste management cooperation, safe guarantee, and inspection and monitor manner should have enlisted in the Act to cover independency of regulatory body and check and balance doctrine under the IAEA principle.

5. Conclusions

The objective of the study is to introduce newly enacted Korea Radioactive Waste Management Act and compare it with the IAEA Principles for a nuclear waste management. From the comparison and analysis, it is concluded that most of the IAEA principles are applied to the Act. One thing I suggest is that the Act is required to prescribe and supply the legal ground of the regulatory body's monitoring and inspection power.

REFERENCES

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