

Legal Analysis of EPC Contract of the Nuclear Reactor in the aspect of Nuclear Law

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1. Introduction

Recently, Korea Nuclear Industry and R&D Institute obtained order of Nuclear Reactor construction from the UAE and the Jordan. Though the UAE's nuclear power plant and the Jordan's Research Reactor were different each other legal issues raised in EPC contract between employer and contractor had very close characters and similar suggestions. New nuclear country have not established all necessary entities regarding regulation and control and enacted laws yet. However, nuclear technology shall be transferred to the country that is ready to or have equipped all mandatory safeguard and safety. From the reality, nuclear specific issues such as the Nuclear Indemnity, Ownership of Intellectual property, Training program for operating technicians, and nuclear licensing are emerging in the EPC contract and finding consensus to the issues between both parties were time consuming work. Our studies will analysis the issues and try to find impartial guideline.

2. Legal Analysis of Nuclear Specific Issues

This section will review and analysis each nuclear specific issues and balanced guideline comes from the analysis will be shown.

2.1 Nuclear Indemnity

Though the contract clause shall not be generalized, most of Nuclear reactor EPC contract might have "the Nuclear Indemnity" provision. Sample foam of the provision is as follow

"Notwithstanding anything to the contrary in this contract, the Owner as an operator of nuclear reactor shall indemnify and at all times keep indemnified the contractor from and against any loss or liability incurred or suffered by them arising from any nuclear damage whether arising out of or resulting from the construction and operation of the nuclear reactor"

As the sentence explains, nuclear liability arising out of nuclear project shall only belong to the operator, not contractor or constructor. Reason why of the doctrine is that impact and cost of nuclear damage are very tremendous as we experienced from the Soviet accident. If contractor assume the liability, the cost or risk shall prevent global nuclear industry from entering into EPC contract of nuclear reactor. Shareholder of the nuclear business company would not allow his or her company's

overburden and assume the risk of company bankruptcy. Though the doctrine spread to global practice of nuclear business, new nuclear country would not want to get the risk and indemnify nuclear reactor constructor. General practice of any other construction does not have the scheme, so legal counsel of the employer may consider the nuclear indemnity clause as a negotiable issue. I believe that contract negotiation in the UAE and the Jordan project had treated the nuclear indemnity issue and the issue raised a lot of tension between employer and contractor.

International regime concerning nuclear damage and its' impact to environment and neighbor country draw clear cut line to the issue. Position of Paris Convention and Vienna Convention regarding nuclear liability is that Operator of nuclear reactor shall have an absolute and strict liability to the nuclear damage arising out of construction and operation. The meaning of absolute and strict liability is that if the nuclear accident occurred, all responsibility shall be charged to the operator and any party relating to the nuclear project shall be indemnify as long as the party did not commit huge misconduct. Under the doctrine, victim of nuclear damage can get fast compensation without litigation that finding faulty party. New nuclear country may want to put some nuclear responsibility into constructor and constructor's explanation about and application of the doctrine may not be easy work.

2.2 Intellectual Property (IP)

World Intellectual Property Organization defined that intellectual property refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. The new nuclear country intend to obtain full right to use contractor's IP regarding nuclear technology and ownership of any information created under the procedure of the his/her project. One of prominent differences of nuclear industry from others is that international nuclear convention and group monitor all of transaction regarding nuclear facility, material, and fuels. Transferor and transferee should disclose and notify the transaction and right to use or ownership is only valid as long as the transferee keeps international guideline such as nuclear supplier's group part I &II. This unique restriction of ownership and right to use shrinks the employer's ownership, so the employer may disagree with the application of the principle. However

peaceful use of nuclear energy and global cooperation for banning proliferation of nuclear weapon shall require the conditional restriction.

2.3 Training

Training program of operator for Nuclear Power plant or research reactor is also one of contractual issues. New nuclear country does not have many human resources to operate nuclear facility. Special training program, number of trainee, financing and expense, and participation of construction shall be treated. The employer usually want to dispatch more potential members to operator training program and insist the expense for the training was included in contract price. The employer would like to make their technician participating in all construction process from designing to commissioning. However, contractor would like to decrease cost and numbers of trainee and technician. Administrative management and confidentiality are concerning points to the contractor.

2.4 Nuclear licensing procedure

In some case new nuclear country has not yet established nuclear regulatory body that give operating license to the nuclear facility. It means that there is no technical guideline contractor should follow. Contractor may get huge risk of getting licensing if regulatory body's licensing procedure and guide are made later on their construction or under construction. Risk allocation to this issue should be also treated in negotiation period.

3. Conclusions

This study treated critical legal issues of EPC contract of nuclear reactor. Nuclear Indemnity for contractor, Intellectual property restriction, Nuclear Licensing procedure, training operator are arising out of typical character of nuclear energy.

REFERENCES