

## A Study on Improvement of Export Control System for the Nuclear Facility

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### 1. Introduction

The Republic of Korea joined Nuclear Suppliers Group(NSG) in 1995 and became a major nuclear supplier both in name and reality by contracting the Project of UAE Braka Nuclear Power Plant(BNPP) in 2009 and the Project of Jordan Research and Training Reactor(JRTR) in 2010. And ROK is currently negotiating with several countries such as Finland and Vietnam for more projects, so it is expected to obtain more orders of commercial and research reactor.

At this point of time, we found that it is difficult to apply individual export licensing system as it is for the big nuclear project such as BNPP and JRTR Project. Because the nuclear project in foreign country contains transfer of thousands of items and technical documents, including a considerable number of strategic items, issuing individual licenses for all items and documents can cause the inefficiency of the project. So, an appropriate export control system which can support such a project is necessary.

In this study, we focused on how to improve the export control system to guarantee not only time efficiency but careful management of strategic goods.

### 2. Analysis of Domestic and Foreign Systems

#### 2.1 Domestic System

To support smooth progress of the project, ROK government is applying individual export licensing system flexibly for BNPP and JRTR project. In December 2010, government held a consultative meeting composed of related administrative agencies, institutions, and legal experts. In the meeting, they identified that it is possible to apply individual export licensing system to export control of above projects if authoritative interpretation of current law could be made. So they agreed to introduce new concepts of blanket single assurance(BSA) and comprehensive export license.

In case of current individual export licensing system, government assurance should be obtained item by item for the transfer of goods in Trigger List. If we apply that principle to the BNPP or JRTR project, it is so time-consuming as well as it could be a burden to governments of both importing and exporting country. If we consider that these nuclear projects are government-lead projects, item by item assurance is not meaningful. For the BNPP and JRTR project, therefore, ROK government decided to introduce blanket single assurance

which covers all strategic items included in the scope of project.

And, in current system, export license application should be submitted item by item. But, by introducing comprehensive export license especially for the BNPP and JRTR project, one export license application is allowed to contain multiple items, and government issues one export license which includes a bundle of items. This comprehensive export license allows government and participating companies to save their time and human resource.

Fig.1 shows the flow of current system for strategic item management.



Fig.1. Flow of current export control system

Even though BSA and comprehensive export license have reduced the burden of participants compared to the original individual export license system, there still exist time and human resource consuming problems.

#### 2.2 Similar Systems in foreign countries

We analyzed foreign export licensing systems to see how they control strategic goods when they export a nuclear power plant or carry out a big project that transfer of strategic items occurs.

In case of U.S, there is "Facility License" system which is specialized for the export of nuclear power plants. If an exporter applies and obtains Facility License, they don't need to apply for classifications or export licenses any more for all items transferred in the scope of project. Precondition for Facility License is to make an agreement with the importing country for peaceful use of nuclear energy. And, similarly, U.S. government provides another comprehensive export license named "Project License" for all activities including extension, maintenance, or operation of existing facilities.

In case of Spain, there is "Global Export License" system which is applicable for the project including transfer of many items and targeting at multiple countries, like nuclear fuel supply, construction of nuclear power plants, and subcontract related to nuclear facilities. Spain government reviews the list of items and technology that are expected to be transferred and issues Global Export License. The license is valid for 5 years

and the exporter should submit the list of actually transferred items and technology half yearly. For joint international research or bilateral cooperative programs, Spain government issues a Global Project License, which is similar to Global Export License system in implementation.

And, we found that several countries in Europe including U.K., France, and Germany, are managing comprehensive export licensing systems to support efficient trade of military items or dual use items.

### 3. Nuclear Plant Export License

In previous chapter, we reviewed internal and external systems for the big projects concerned with strategic items. And, base on that, we drew a new licensing system named "Nuclear Plant Export License".

#### 3.1 Definition & Principle

The definition of Nuclear Plant Export License is as following: In case that export of the nuclear plant to a certain country is considered not to threaten international peace and safety, the Nuclear Safety and Security Commission(NSSC), in consultation with related administrative agencies, can issue a comprehensive export license for the whole items included in the scope of the nuclear plant. And, the "nuclear plant" here means a reactor for power generation, a reactor for seawater desalination or hydrogen production, a related facility, or an auxiliary installation of reactor.

The principle is efficient management of strategic items while we keep faithfully fulfilling the nuclear non-proliferation.

#### 3.2 Main Concepts

Main concepts introduced for the Nuclear Plant Export License are as follows:

First, only one comprehensive license will be issued in this new licensing system, covering all items consisting of the nuclear plant. Once the license is granted, exporter need not apply for classifications or individual export licenses concerned with the project.

Regarding government assurance, one BSA document from importing country, covering all items of the project, will be taken as it is done in BNPP and JRTR cases.

And, the exporter should report the list of actually transferred items quarterly and government will classify the items by strategic and non-strategic for follow-up management. This is a big difference with individual export license system in which classification is usually finished before license application.

For the follow-up management of transferred strategic items, two governments will sign the bilateral MOU and hold an annual meeting. If necessary, ROK government will support importing country in establishing the strategic items management system. Beside,

the government will provide participating workers with compulsory education course in order that they keep in mind the importance of export control and comply with regulations.

Fig.2 shows the implementation procedure of Nuclear Plant Export License system.

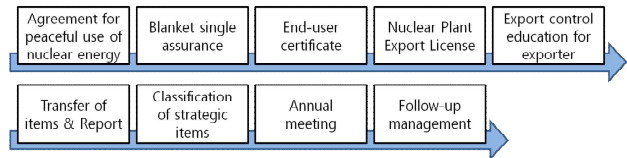


Fig.2. Flow of Nuclear Plant Export License system

### 4. Conclusions

This paper proposed a new export control system which is specialized for export of the nuclear plant. By introducing Nuclear Plant Export License system, it is expected that the burden of government and participating companies would be reduced significantly and time period for licensing would be shorten.

To introduce this system successfully, opinions of related administrative agencies should be gathered and reflected. After that, it could be added to export control regulations and finally contribute to the efficient management of strategic items.

### REFERENCES

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