Introduction to Technology Export License of Nuclear Facility

Hana SEO, Chansuh LEE, Dong-hoon SHIN*

Korea Institute of Nuclear Nonproliferation and Control (KINAC), 1534 Yuseong-daero, Yuseong-gu, Daejeon *Corresponding author: hana@kinac.re.kr

1. Introduction

The stakeholders such as vendor and producer involved in the trade of commodities that could be used for the creation of WMD (Weapons of Mass Destruction) are required to apply for the commodity classification and the export licensing before exporting the strategic items according to the Guideline of International Export Control Regime. In this regime, the Nuclear Safety and Security Commission (NSSC) has authority on final decision making. And the Korea Institute of Nuclear nonproliferation and Control (KINAC) has missions to review the classification and export licensing technically.

In principle, classification and export licensing are applied and reviewed individually. However, the number of application for classification and licensing has increased geometrically in the last three years. This is largely a due to the contract that the Republic of Korea (ROK) has finalized to build the UAE Barakah Nuclear Power Plant (BNPP) and Jordan Research and Training Reactor (JRTR). This circumstance brought an administrative burden for the government and related institutes as well as stakeholders.

This article introduces the law related to the "Technology Export License of Nuclear Facility" which was developed and legislated to improve the efficiency and effectiveness of commodities classification and export licensing

2. Current Status

2.1 Status of exporting licensing in the ROK

Since 2010, the KEPCO consortium has requested classification reviews for about 3,300 items related to the project of the BNPP construction project as shown in Table I. Around 1,000 items which were identified as strategic items by classification have been authorized for export.

The DAEWOO Consortium has also requested classification reviews for 2,500 items related to the JRTR construction project as shown in Table I. And close to 100 items have been authorized for export

Table I: Status of Classification and Export license for UAE Barakah plants

| | Classification | | Export License | |
|------|----------------|------|----------------|------|
| | BNPP | JRTR | BNPP | JRTR |
| 2011 | 732 | 526 | 289 | 77 |
| 2012 | 697 | 983 | 44 | 12 |

| 2013 | 1,847 | 991 | 617 | 12 |
|-------|-------|-------|-----|-----|
| Total | 3,276 | 2,500 | 950 | 101 |

2.2 Basic Principle of Strategic Items export

The stakeholders have to submit the Certificate of end user on each item when applying the export license, according to the Minister's Regulation for the Export and Import of Strategic Goods. After receiving an application for licensing, the NSSC has to request to the trade country, the government assurance which guarantee that the imported goods are used only for peaceful purpose.

Unfortunately, by reviewing classification and requesting government assurance might interrupt the exporting schedule. Therefore, stakeholders have to apply the export procedures considering the delivery schedule.

2.2 Guideline for comprehensive export license

It has been estimated that government assurance could take between one month and one year to be given. This state forced KINAC and government to arrange the guideline for Comprehensive Export License (CEL). This system requests single government assurance (namely, Blanket Single Assurance) for single project and the each Certificate of end user for whole package. After the items have been transferred, the trading governments required to verify the transferred items mutually through the annual meeting. Fig. 1 shows the guideline for receiving licensing in order to export strategic items. And Table I shows the differences between each licensing system.



Fig. 1. Schematic flow of the Comprehensive export License (CEL)

Table I: Difference with the individual export license

| ruste 1. Birrerence with the marviadar export needse | | | |
|--|----------------------|---|--|
| | Individual | Comprehensive | |
| | Export License (IEL) | export License (CEL) | |
| Commodity | Implemented on each | Implemented on each | |
| classification | item | item | |
| Export | Licensing on each | Licensing for applied | |
| license | item | package | |
| Government assurance | Receipt on each item | Blanket single assurance for single project | |
| Certificate of | Receipt on each item | Receipt on a applied | |

| end user | | package |
|----------------|----------------|--------------------------------|
| Annual meeting | Not mandatory | Applying |
| Reporting | When necessary | Reporting done through meeting |

Although introduction of this system brought the export control process reduction, there existed still administrative burden on the government and KINAC. It led to the new system for controlling the strategic items effectively and supporting trading industry efficiently.

3. Technology Export Licensing of Nuclear Facility

The USA, UK, Spain and other countries are adopting the more effective system adapted for exporting nuclear facility or carrying out other such large scale projects [1]. The USA and Spain have named their system the Facility License and Global Export License, respectively. These systems request single license for a whole plant,

The research on the Export License of Nuclear Facility had been conducted by KINAC since 2011. Based on these results, Minister's Regulation for the Export and Import of Strategic Goods was revised on January 2014 [2]. Every technology for single facility could be exported by single license, under this new regulation. The classification is not required before receiving a license. And the stakeholders should report the details of those items prior to export. Fig. 2 shows the schematic flow of exporting strategic items according to this system. Table II shows the differences between CEL licensing systems.



Fig. 2. Schematic flow of Technology Export License of nuclear facility (TEL)

Table II: Difference with the comprehensive export license

| | Comprehensive Export License (CEL) | Technology Export License of nuclear facility (TEL) |
|--------------------------|---|---|
| Commodity classification | Implementing on each item | Implementing on each item |
| Export license | Licensing for applied package | Single Licensing for single project |
| Government assurance | Blanket single assurance for single project | Single Receipt f or single project |
| Certificate of end user | Receipt on a applied package | Receipt for single project |
| Annual meeting | Applying | Mandatory |
| Reporting | Reporting done through meeting | Mandatory |

As shown in Table II, the system on the Technology Export License of Nuclear Facility has the legal force by Minister's regulation revised with the system. It brings the justification on the process simplifying when exporting the nuclear facility.

Moreover, this system may makes reduction about 800 licenses a year, when comparing individual export license and comprehensive export license. Also, KINAC expects the administrative burden for Government and KINAC itself to decrease.

4. Conclusions

This system could significantly reduce the licensing burden for transferring the technologies. However, the classification and license on this system are still requested when transferring the goods. Therefore, KINAC will continue to figure out the needs for the stakeholders and keep searching for solutions to problems inherent in the industry..

REFERENCES

- [1] Ok-joo Kim, Dong-hoon Shin, Seung-hyo Yang., KINAC, A Study on Improvement of Export Control System for the Nuclear Facility, Transactions of the Korean Nuclear Society Autumn Meeting, 2012.
- [2] Minister's Regulation for the Export and Import of Strategic Goods, MOTIE 2014-54, 2014.