**A Study on a Method of Improving the Export License for Nuclear Power Plant Technology**

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1. Introduction

In Korea, the export of nuclear power plant-related projects has continued from the UAE BNPP construction project in 2009 to the SMART PPE project with Saudi Arabia in 2015 and the UAE BNPP follow-up projects. All of these projects implement export controls. Strategic items subject to export control can be largely divided into three categories: goods, intangible goods in electronic form such as software, and technology [1]. If exporters intend to export such strategic goods, exporters must export them after obtaining an export license. Currently, export license systems are largely divided into the Individual Export License System, the Comprehensive Export License System, and Export License on Technology of Nuclear Power Plant (hereinafter referred to as “plant export license system”). The plant export license system was established for the efficient implementation of export control for nuclear plant business in 2015[2]. Since the establishment of this system, export control has been implemented by issuing the plant export license system for various plant businesses.

This paper compares the differences between the export control implementation procedures of the individual export license system and the plant export license system, analyzes the problems of the plant export license system, and derives improvements that should be reflected in future regulation revisions.

2. Analysis of the Plant Export License System

2.1 Introduction to the Plant Export License System

As mentioned above, as large-scale export projects in the nuclear field became active and the existing export type focused on goods was changed to a technology-oriented export type, unnecessary administrative burdens were incurred by both exporters and the regulatory body in implementing the individual export license system. In addition, the effect in terms of actual export control was insignificant compared to the efforts made to implement such export control.

Accordingly, an efficient export license system is needed for export projects in which a large amount of technology was transferred, and the plant export license system was created.

The plant export license system permits export of nuclear power plant projects in a lump during the period of the project [2]. This system is different from the individual export license system, which requires an individual export license for each technology.

2.2 Comparison between the Individual Export License System and the Plant Export License System on the Export Control Implementation Procedure

Among strategic items, the procedure for implementing export control of technology can be divided into classification and the export license. The classification is a system that judges whether the technology to be exported is a strategic item. Technology designated as a strategic material through the classification can only be exported after applying for an export license, including submission of the required documents, and then obtaining the license. Individual export permits can be exported only through these processes for all technical documents. All technical documents under the individual export license system can only be transferred through this process.

![Fig. 1. Transfer Process under the Individual License System](image-url)

For the plant export license system, the process of applying for the classification and the plant export license system for the entire plant business is the same as that for the individual export license system. However, after the plant export license is issued, in the case of transferring technical documents to the relevant business, it is possible to perform only the classification and transfer without a separate export license application process. In addition, if the head of the permitting institution approves, it is possible to conduct the classification after relocating first. If the transfer details are reported to the permitting institution every quarter for transferred technology, all the implementation procedures according to the issuance of the license must be performed.
2.3 Improvement Method of the Plant Export License System

The main problem with the current plant export license system is that the follow-up management after the issuance of the license is based on a system that focuses on the tangible transfer of the type of technology.

With the recent development of information and communication technology, the form of technology transfer has diversified, and various technology-oriented projects have been carried out. This has created an atmosphere in the international community where it is necessary to control the intangible transfer of technology.

Accordingly, Korea also expanded the export control target, which was limited to the transfer of technology, to intangible transfer through revision of the Foreign Trade Act in 2014[1]. However, the follow-up management of the plant export license system focuses on tangible transfer of the technology. It is difficult to apply the quarterly reporting of technology transfer details and revisions to the intangible transfer of technology through oral lectures or consulting.

In addition, although the system was created to reduce the administrative burden of exporters and regulatory bodies, a great deal of administrative power is still consumed. Even though export licenses have already been issued for all technologies in the business, it is considered an unnecessary process that does not match the intent of the establishment of the plant export license system to still have to obtain classification for all technical documents.

Accordingly, in improving the system in the future, it is necessary to improve the management of the intangible transfer of technology while reducing unnecessary administrative burden. In fact, it is close to impossible to manage intangible transfers, both verbally and by action. In the end, these parts must be managed by the business operator who actually conducts the business. Regulatory bodies should reduce unnecessary administrative burdens so that business operators can manage themselves, and at the same time assign responsibility and authority, and check the implementation through periodic inspections.

3. Conclusions

In this paper, the problems of the current plant export license system were derived by comparing the plant export license system with the individual export license system, and by analyzing the export control implementation results of the plant export license system. If the system is improved by applying the improvement methods suggested in this study, it will be possible to establish an export control system that fits the purpose of the plant export license system.

REFERENCES

[1] MOTIE, Foreign Trade Act
[2] MOTIE, Minister’s Regulation on Export and Import of Strategic Items