

The status and latest issues on the implementation of the Additional Protocol at KAERI

Hyun Sook Kim, Byung Doo Lee, Ho June Park
Korea Atomic Energy Institute, 150 Deokjin-dong, Yuseong-gu Daejeon, 305-353, South Korea

1. Introduction

Republic of Korea signed the Additional Protocol on 21 July 1999. It entered into force in February 2004. The initial declarations pursuant to the Additional Protocol (AP) were provided to the Agency in due time. So, KAERI has provided the expanded declarations 4 times since the initial declarations submission.

This paper describes the implementation status of the expanded declaration, latest issues on the implementation of the Additional Protocol at KAERI concerning Article 2.a.(i) and 2.a.(iii) and a update of the internal regulation procedures at KAERI.

2. Implementation status of the expanded declaration at KAERI

KAERI submitted the annual update of the expanded declaration to the Ministry of Science & Technology (MOST) in March 2006 and the details of the declaration are as follows ;

- Revision of R&D activities which were declared in 2005 under Article 2.a.(i).
- Addition of R&D activities of Article 2.a.(i).
- Revision of buildings which were declared in 2005 under Article 2.a.(iii).
- Addition of a building, containers and structures of Article 2.a.(iii).
- Revision of the declaration added in 2005 under Article 2.a.(iv).
- Revision of a R&D activity of the general plans of Article 2.a.(x).

3. Latest issues on the implementation of Additional Protocol at KAERI

There is a procedure to prepare for the declaration of Article 2.a.(i) of AP at KAERI as follow;

Nuclear Control Management Department (NCMD) requests the information of all R&D projects from the relevant departments.

NCMD notifies the managers of all R&D projects to provide the descriptions of Article 2.a.(i) if the project needs to be reported under Article 2.a.(i) of AP.

NCMD checks whether R&D projects to be omitted in the expanded declaration exist or not by comparing a list of all the R&D projects and information received from the managers of the R&D projects. If there is a R&D project declared to NCMD, NCMD requests the manager of the R&D project to review and provide the description of Article 2.a.(i)

The relationship between the R&D projects and their locations is reviewed and the updated location of DIQ

is also added to the expanded declaration of Article 2.a.(iii) at the NCMD.

NCMD should receive the description of the Article 2.a.(i) by 10 March of each year from the managers of all the R&D projects because the annual update of the expanded declaration should be submitted to the MOST by 31 March of each year pursuant to the notice of MOST. But it is a insufficient time to perform the above mentioned procedure. Also, the med- and long-term R&D projects in KAERI are ended by 28 February and started by 1 March. So, the workload of the med- and long-term R&D departments is so heavy during that time. In particular, the determination of the work scope of the med- and long-term R&D projects can be delayed due to a budget problem for the R&D at KAERI. Therefore, it is necessary to discuss a change of the declaration submission times stated in the notice of the MOST with the MOST.

3.1 Expanded Declaration of Article 2.a.(iii)

3.1.1 Addition of the temporary building

According to the Additional Protocol, the declaration of Article 2.a.(iii) should include a general description of each building on each site, including its use and, if not apparent from that description, its contents. The description should include a map of the site.

So, a few of the buildings at KAERI such as the guard office, temporary containers, structures and others were not included in the KAERI site map which was declared in 2005 under Article 2.a.(iii) because there is no definition of the buildings in the AP.

But the IAEA requested KAERI to provide a general description of the temporary buildings such as a container and structure at KAERI and to add it to the DIQ based on the guide of the expanded declaration. KAERI accepts it due to the nature of the infrastructure and activities of the KAERI's nuclear fuel cycle. So, the containers and structures at Daejeon were added to the declaration of Article 2.a.(iii) in 2006.

But there are some problems on the expanded declaration of a temporary building. First of all, there is no criterion for the size of structures and containers to be declared. So, it is necessary to discuss this with the IAEA.

Secondly, the description for a temporary building such as a container and structure should include the location, the use of the building and the main contents of the building. But, the use, contents, location of the containers added to the declaration of Article 2.a.(iii) can be changed without the recognition of the NCMD. It can be moved and remodeled easily because KAERI

doesn't have any internal procedure when a container is moved and remodeled. KAERI should consider how to control the movement and use of a container for the implementation of the Additional Protocol.

3.1.2 Revision of the site map

After the site walk at KAERI in May 2005, IAEA pointed out that the map of the AP did not coincide with the map of the satellite.

The expanded declaration of Article 2.a.(iii) should include a map of the KAERI site. Also, a current diagram or map of the KAERI site showing the exact boundary of the site, the location of the buildings and other structures, roads, rivers, etc., should be attached to Article 2.a.(iii). But the map of the KAERI site used for the expanded declaration of Article 2.a.(iii) in 2005 is a little bit different from that of the satellite and DIQ. So, KAERI got an image file of the satellite from the IAEA and revised the map of the AP by using a satellite image to coincide with the map of the satellite and DIQ in 2006.

3.2 Update of the internal regulations procedures in KAERI

IAEA recommended the current edition of the internal regulations procedures at a facility level should be updated in order to document all the relevant measures pursuant to the implementation of the Additional Protocol, in particular the procedures for complementary access, including managed access as well as R&D. So, a update of the current edition of the internal regulations procedures at KAERI is going on. It includes procedures for complementary access, expanded declaration and export /import control.

4. Conclusion

There are some issues to review for the implementation of the AP as mentioned above. It is necessary to discuss the criterion for the size of a structure to be declared with the IAEA and to consider how to control the movement and use of a container for the implementation of Article 2.a.(iii). Also, a discussion about a change of a declaration submission time stated in the notice of the MOST with the MOST is needed.

In addition, methods and procedures for a more efficient implementation of the AP should be improved at KAERI in the near future.

REFERENCES

[1] "Protocol Additional to the Agreement between the Government of Korea and the International Atomic Energy Agency for the Application of Safeguards in Connection with

the Treaty on the Non-Proliferation of Nuclear Weapons" entered into force on 19 February 2004.

[2] "Guidelines and Format for Preparation and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements", Services Series 11.

[3] H.J. KIM etc, "Implementation of the Expanded Declaration under the Additional Protocol in KAERI", Korean Nuclear Society Fall Meeting, 2005.