Korea Radioactive Waste Management Status and Future

Sungwook Hong

Korea Radioactive Waste Agency (KORAD),
19, Chunghyochun-gil, Gyeongju-si, Gyoengsang-buk-do, South Korea, e-mail:
heart@korad.or.kr

1. Status of Radioactive Waste Management in Korea

There are 25 nuclear power plants in Korea, and their power generation capacity is 24,650 MW [1]. Nuclear power generation is essential, and the amount of radioactive waste generated by NPP is increasing every year. Therefore, safe management of radioactive waste is necessary.

2. Gyeongju Low and Intermediate-Level Radioactive Waste Disposal Facility

In 2005, Gyeongju was selected as the final site through the participation and voting of local residents during the site selection process [2]. L&ILW first disposal facility's disposal capacity is 100,000 drums. 1st stage's disposal facility type is Underground silo type and was completed in 2014 [3]. 2nd Stage's disposal type is shallow land disposal type. The capacity of 2nd Stage's disposal facility is 250,000 drums and was completed in 2023 [4].

3. HLW Management Policy and Plans

The Korean government issued a basic plan [5] on HLW management in 2016 built upon recommendations from the Public Engagement Commission on Spent Fuel Management (PECOS). The basic plan contained development of a deep geological repository, generic underground research laboratory (URL), and an interim storage facility.

The Government issued the 2nd Basic Plan [6] on HLW Management based on the recommendations by various stake holders.

REFERENCES

- [1] KAIF. (2023, April, 13). https://www.kaif.or.kr/ko/?c=188
- [2] Korea Radioactive Waste Agency. (2023, April, 13). https://www.korad.or.kr/korad/html.do?menu_idx=164
- [3] Korea Radioactive Waste Agency. (2023, April, 13). https://www.korad.or.kr/korad/html.do?menu_idx=154
- [4] Korea Radioactive Waste Agency. (2023, April, 13). https://www.korad.or.kr/korad/html.do?menu_idx=157
- [5] Ministry of Trade, Industry & Energy, Basic Plan on High level Waste Management (2016).
- [6] Ministry of Trade, Industry & Energy, 2nd Basic Plan on High level Waste Management (2021)