Provisional Translation

Medium-Term Implementation Plan for Spent Nuclear Fuel Reprocessing

The Nuclear Reprocessing Organization of Japan (NuRO) shall carry out its operations according to the Medium-Term Implementation Plan for Spent Nuclear Fuel Reprocessing (hereinafter referred to as "Medium-Term Implementation Plan") formulated in accordance with the Spent Nuclear Fuel Reprocessing Implementation Act (hereinafter referred to as "the Act"). NuRO shall proceed with carrying out the Medium-Term Implementation Plan steadily and efficiently by giving top priority to ensuring the safety of reprocessing and other related matters.

1) Timing, Location, and the Quantity of Spent Nuclear Fuel for Reprocessing

NuRO entrusts[1] the reprocessing services to Japan Nuclear Fuel Limited (hereinafter referred to as “JNFL”) [2] and implements it at JNFL's Rokkasho Reprocessing Plant.

With regard to the quantity of spent fuel reprocessed, based on the principle of not possessing plutonium without specific purposes, and taking into account the intent of "The Basic Principles on Japan's Utilization of Plutonium" (determined by the Japan Atomic Energy Commission)[3] , the plan shall be as follows:

FY	2021	2022	2023
Quantity of spent nuclear fuel for reprocessing (tU)	0	0	70
(Reference) Estimated plutonium recovered (tPut)	0	0	0.6

(Reference) Forecast of the quantity of spent fuel reprocessed (estimated quantity of plutonium recovered) in FY2024 and FY2025:

・FY2024: 170tU (1.4tPut)

・FY2025: 140tU (1.1tPut)

2) Timing, Location, and the Quantity of Plutonium for MOX Fuel Fabrication

NuRO will entrust MOX (uranium and plutonium mixed-oxide) fuel fabrication services to JNFL[4] and will implement it at JNFL's Rokkasho MOX Fuel Fabrication Plant.

With regard to the quantity of plutonium for MOX fuel fabrication, based on the principle of not possessing plutonium without specific purposes, and taking into account the intent of "The Basic Principles on Japan's Utilization of Plutonium", the plan shall be as follows:

1 Approval obtained from the Minister of Economy, Trade and Industry in October 2016 in accordance with Article 42 of the Act.

2 Refers to reprocessing operator stipulated in Article 44 of the "Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors" (hereinafter referred to as "Reactor Regulation Act").

3 Decision by the Japan Atomic Energy Commission on July 31, 2018.

4 Refers to a processor stipulated in Article 13 of the Nuclear Reactor Regulation Act.

FY	2021	2022	2023
Quantity of plutonium for MOX fuel fabrication*2(tPut)	0	0	0

(Reference) Forecast of the quantity of plutonium for MOX fuel fabrication in FY2024 and FY2025

・FY2024: 0tPut

・FY2025: 0.6tPut*1

*1 The figure for FY2025 is the estimated quantity of plutonium recovered from 70tU of spent fuel reprocessed in FY2023. The actual amount for each fiscal year will be properly reflected in the Medium-Term Implementation Plan when the exact amount is determined by both of the electric power companies and JNFL taking into account the number of MOX fuel assemblies fabricated.

*2 Plutonium recovered from commissioning tests at the Rokkasho reprocessing plant will be reflected in the Medium-Term Implementation Plan together with the specifics of *1.

3) Regarding the Implementation of Other Activities related to Reprocessing

NuRO will properly store and manage radioactive waste separated by reprocessing and radioactive waste generated by operation, including waste generated in the future, at JNFL's Rokkasho Reprocessing Plant until they are delivered for final disposal.

NuRO will properly continue to store and manage radioactive waste returned from overseas at JNFL's Waste Storage Management Facility until it is delivered for final disposal for a period of 30 to 50 years, which is the necessary period of time for cooling the waste. Also, NuRO will appropriately store and manage waste to be returned from overseas in the future at Waste Storage Management Facility until it is delivered for final disposal.

With regard to decommissioning the plants and facilities described in the above paragraphs 1), 2) and 3), NuRO will commence after their operation is terminated, based on the decommissioning implementation policy prepared and published by JNFL in accordance with the Nuclear Reactor Regulation Act.

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