

**On Revised Medium-Term Implementation Plan for Spent Nuclear Fuel Reprocessing
by the Nuclear Reprocessing Organization of Japan
— Views of the Japan Atomic Energy Commission —**

March 22, 2023
Japan Atomic Energy Commission
Cabinet Office, Government of Japan

In response to the request by the Minister of Economy, Trade and Industry as of March 13, 2023 (20230306, Document No.11)¹, the Japan Atomic Energy Commission hereby presents its views on the revised Medium-Term Implementation Plan for Spent Nuclear Fuel Reprocessing (hereinafter referred to as "the Medium-Term Implementation Plan") which has been applied for approval by the Nuclear Reprocessing Organization of Japan (hereinafter referred to as "NuRO").

The Medium-Term Implementation Plan specifies the locations, timing and quantity of reprocessing of spent fuel and MOX fuel fabrication during the three-year period from FY2023 to FY2025.

The locations indicated are the Rokkasho Reprocessing Plant (hereinafter referred to as "RRP") and the MOX Fuel Fabrication Plant (hereinafter referred to as "J-MOX"), both owned by Japan Nuclear Fuel Ltd., (hereinafter referred to as "JNFL"). These and other related facilities are subject to the safeguards by the International Atomic Energy Agency (IAEA).

With regard to the timing and quantity of reprocessing, it is planned, as long as reprocessing is concerned, that 70 tons of spent fuel will be reprocessed to recover 0.6 tons of plutonium in FY2025 based on the operational schedule of RRP and J-MOX. The 0.6 tons of recovered plutonium is assumed to be fully consumed in pluthermal² reactors in FY2027 and thereafter taking into consideration necessary period for fuel fabrication, transportation and so on. The Commission considers the plan is understandable based on the current circumstance such as the operation plan of pluthermal reactors, the operational outlook for RRP and other related facilities. The Commission recognizes, however, that the operational status of J-MOX and plutonium consumption in pluthermal reactors after FY2026 contain uncertainties and could be changed depending on future development.

In light of these circumstances, the Commission requests that the Minister of Economy, Trade and Industry, on approving the Medium-Term Implementation Plan, provide the necessary and appropriate instruction and guidance for NuRO and other relevant organizations on the following

¹ The Minister of Economy, Trade and Industry requested an opinion of the Japan Atomic Energy Commission as per the resolutions accompanying the Act for Partial Revision of the Spent Nuclear Fuel Reprocessing Fund Act.

² The term "pluthermal" stands for the use of MOX fuel assemblies containing plutonium in thermal reactors.

points to ensure the peaceful use of nuclear energy and the balance between demand and supply of plutonium.

1. When NuRO recovers plutonium through reprocessing, it should make utmost efforts to properly operate RRP and J-MOX taking account of the balance between demand and supply of plutonium, while ensuring transparency, as set out in "The Basic Principles on Japan's Utilization of Plutonium" (declared by the Commission on July 31, 2018). The power companies are required to make their every effort to steadily consume the MOX-fuel produced by J-MOX at their domestic reactors.
2. NuRO is required to make revised reports of the Medium-Term Implementation Plan in accordance with the progress made in specific initiatives, in a timely and appropriate manner.
3. In the execution of the Medium-Term Implementation Plan, NuRO and JNFL should work together in an efficient and effective manner under appropriate division of roles and implementation framework, placing the highest priority on ensuring safety.
4. JNFL should make an appropriate process management with the highest priority on safety to ensure the safe and smooth operation of RRP and J-MOX, and should work on the continuous nurturing and hand-over of technical expertise to the next generation. In addition, power companies and relevant organizations should provide necessary and sufficient technical and human support for JNFL as required.

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