

The Basic Principles on Japan's Utilization of Plutonium (draft)

July 31, 2018

Japan Atomic Energy Commission

Japan has been using nuclear energy exclusively for peaceful purposes and upholding the principle of not possessing plutonium without specific purposes under the Atomic Energy Basic Act. While taking into account recent circumstances surrounding the use of nuclear energy not only in Japan but also in the world, Japan, cooperating with the international community and attaching greatest importance to nuclear non-proliferation, follows the policies below as it promotes the utilization of plutonium, in order to enhance transparency of its peaceful use.

Based on the above-mentioned views, Japan will reduce the size of its plutonium stockpile. Based upon the realization of the following measures, the stockpile is not to increase from the current level:

1. Approve reprocessing plans under the Spent Nuclear Fuel Reprocessing Implementation Act so that reprocessing is to be carried out only to an extent necessary for steady pluthermal power generation, reflecting the operational situation of the Rokkasho Reprocessing Plant (RRP), the MOX Fuel Fabrication Plant,* and MOX-burning reactors; Instruct the operators and confirm that the produced MOX fuel is to be fully consumed in a timely manner;
2. Instruct the operators so as to secure a balance between demand and supply of plutonium, minimize the feedstock throughout the process between reprocessing and irradiation, and reduce the feedstock to a level necessary for proper operation of the RRP and other facilities;
3. Work on reducing Japan's plutonium stockpile stored overseas through measures including promoting collaboration and cooperation among the operators;
4. Examine all options such as use and disposal of plutonium that is associated with research and development purposes, if there is no concrete plan for its immediate use, while ensuring flexibility depending on the situations; and
5. Steadily promote efforts toward expanding storage capacity for spent fuel.

In addition, in order to enhance transparency, electric utilities and Japan Atomic Energy Agency (JAEA) are expected to develop plutonium utilization plans anew, which describes owners, the amount of plutonium in possession and the purposes of plutonium utilization, and then release them every fiscal year.

*The Japan Nuclear Fuel Limited (JNFL) plans to complete the construction of the RRP and the MOX Fuel Fabrication Plant in the first half of FY2021 and FY2022 respectively.