

JNFL Produces First MOX Fuel

On November 2, Japan Nuclear Fuel Ltd. (JNFL) announced that it had produced the first uranium-and-plutonium mixed-oxide (MOX) at its Rokkasho Reprocessing Plant (in Aomori Prefecture) during active tests using actual spent fuel. Next, JNFL expects to manufacture a powdered MOX-fuel product through heat-treating and pulverizing by mid-month. As for the progress of the active tests, the shearing of the projected 109 PWR fuel assemblies has been completed already, and the shearing of 60 BWR fuel assemblies is set to commence.

On October 27, JNFL Pres. Isami Kojima gave a regular press conference at the company's head office in Rokkasho, explaining the status of the active testing, currently in its second stage, and other matters. Recognizing that improvements in the accuracy of sample analyses is very important – now that tests to confirm analytical reproducibility have been devised – he said that the active tests would move beyond the prior stages of shearing, melting, separation and purification, and forward to the denitration process, in which uranium solution is fed to a uranium denitration tower. He said, “Active tests have reached a crucial juncture.”

From a nuclear nonproliferation point of view, Japan's technology – the denitration of uranium and plutonium solutions mixed in equal amounts – is unique.

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