

JNFL Starts Uranium Testing at Rokkasho

Early on December 21, uranium testing using simulated fuel assemblies and powdered uranium oxide began at the Rokkasho Reprocessing Plant of the Japan Nuclear Fuel Ltd. (JNFL). The aim of the testing is to confirm the plant's operability. The reprocessing plant thus takes an important step forward toward full operation and, ultimately, completion of the nuclear fuel cycle.

At a press conference, JNFL Pres. Isami Kojima said, "It moves me deeply that testing at the facility has finally started. The path toward the facility's establishment has been long and eventful, ever since the Federation of Electric Power Companies (FEPC) first made a request to Aomori Prefecture and Rokkasho-mura back in 1984."

Uranium testing is expected to continue until November 2005, thus taking about a year. Its purpose is to confirm, through the use of radioactive materials, the proper functioning of all facilities and equipment, as well as to identify any problems. Afterwards, an active test will be conducted using actual spent fuel under the same conditions as those during commercial operations.

At 7:45 a.m. on December 20, the vessel Hokushin Maru, carrying about 31 tons of depleted uranium arrived amidst strong winds at Mutsu-Ogawara Port. One hour later, at 8:44 a.m., cranes began lifting the containers from the ship. A total of 18 oval metal containers (containing 180kg of powdered uranium oxide each) and 24 cylindrical containers (with two simulated fuel



Cranes began lifting containers from the ship on December 20

assemblies each) – which had been shipped from Mitsubishi Nuclear Fuel Co.'s fabrication plant in Tokai-mura (Ibaraki Pref.) – were unloaded into special vehicles, then transported over a specially-constructed road to the Rokkasho Reprocessing Plant, where they were again moved by crane to a temporary storage area. Land transport finished soon after 3:00 p.m.

Uranium testing began as soon as the containers holding powdered uranium were moved to the Uranium Denitration Building. At 9:26 a.m. on the following day, at the central control room of the plant, Jun Shibuya, JNFL director and general manager of the reprocessing plant, confirmed that that transfer of containers delivered the previous day was underway and proceeding without difficulty. Upon hearing the news, the employees in the room applauded spontaneously.

Shortly after 10:00 a.m. on the same day, Pres. Kojima held a press conference at the company's headquarters in Rokkasho-mura. Declaring that the reprocessing plant had entered a new phase, he stated, "We are acutely aware of our mission's importance to the government's nuclear policy, and are determined to carry it out steadily." Referring to the operational schedule,

he added, "We will consider the details as the uranium testing progresses, and announce it as soon as it is determined."

Some 53 tons of powdered and other uranium will be used in the testing; the portion delivered on December 20 was the first installment. The remaining 22 tons will come from a fabrication plant belonging to the Global Nuclear Fuel-Japan Co. in Yokosuka City (Kanagawa Pref.), and another plant belonging to Nuclear Fuel Industries in Kumatori Town (Osaka Pref.).

According to JNFL, the testing begun in December will involve the analysis building, uranium denitration building, and the uranium oxide storage building, and focus on dissolving the powdered uranium. Sometime in mid-January, testing will expand to the pre-treatment process building, where the simulated fuel assemblies will be sheared. The entire process will continue until November. The following month, in December 2005, comprehensive testing (i.e., active testing) is expected to begin for the final operational confirmation of all facilities and equipment using actual spent fuel.

Next August, processes in the main buildings will be suspended for a two-month period prior to the active testing. The purpose of that work is to seal, with concrete, a small room (cell) containing the equipment that used to handle radioactive materials, and to correct any problems found during the uranium testing. JNFL will then report the final results of the testing to the Ministry of Economy, Trade and Industry (METI), Aomori Prefecture, and others.

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