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JNFL Begins Modification of Vitrified Package Storage Facilities

On October 18, Japan Nuclear Fuel Limited (JNFL) began work modifying its liquid high-level radioactive waste (HLW) vitrification building and the east wing of the #1 vitrified package storage facility, having received authorization from the Ministry of Economy, Trade and Industry (METI) for the design and construction methods. The construction work will last several months, pushing back the general confirmation testing – the final step of the uranium testing, which originally was scheduled to start in the last part of October – by an equivalent period of time.

The work involves changes to the structure of both the intake and exhaust vents for the coolant air, so as to secure the capacity to remove the decay heat of the vitrified packages. Specifically, the labyrinthine plates of the horizontal ducts will be removed and replaced with a louver, with a labyrinthine plate installed in the shaft instead. Those changes will enable temperatures inside the vitrified packages to be held down to 500℃, and that of the concrete to 65℃ – the design targets in both cases.

In January 2005, the Nuclear and Industrial Safety Agency (NISA), having undertaken an investigation, had pointed out a faulty design in the structure owing to miscalculations of how much decay heat could be removed. JNFL will not begin its general confirmation testing until the modification work is all finished. (See the January 28 article entitled “JNFL to Change Design of Vitrified Package Storage Facilities”.)

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