

Water Leakage within the Controlled Area at Takahama Unit 4

February 20, 2016
The Kansai Electric Power Co., Inc.

At Takahama Unit 4 (pressurized water reactor, rated electric output: 870MW, rated thermal output: 2,660MW), an alarm, “caution on the primary system floor drain” was actuated at p.m. 15:42 on February 20, 2016 when the coolant in the chemical and volume control system was passed through the boron thermal regeneration system before increase of the reactor coolant system temperature.

In response to the event, water supply to the boron thermal regeneration system was terminated at p.m. 15:45 on that day and an operator immediately conducted field inspection. As a result, he found a puddle (2m × 4m × 1mm, approx. 8ℓ) on the floor in front of the condensate demineralizer ^{*1} area (EL 10.5m) in Unit 4 reactor auxiliary building

Subsequently the puddle (total amount of radioactivity: approx. $1.4 \times 10^4 \text{Bq}$ ^{*2}; approx. $1.74 \text{Bq/cm}^3 \times 8\ell$) was wiped off and it was confirmed that there was no remaining contamination.

Besides the puddle, leaked water on the floor was also collected by the auxiliary building sump and other components. The total leakage was estimated to be about 34ℓ and total amount of radioactivity was about $6.0 \times 10^4 \text{Bq}$.

An investigation to identify the causes of the leakage is being conducted.

This event did not cause any radioactive influence on the surrounding environment. Furthermore, there have been no effects on the plant operating parameters, and the plant is in a stable condition.

*1 A filtering system to eliminate impurities from the reactor coolant using resin

*2 The estimated amount of radioactivity of the puddle (approx. $1.4 \times 10^4 \text{Bq}$) is below one 200th of Japan’s threshold value.

Takahama unit No.3 is KEPCO's first unit that has passed the safety screening against the new regulatory requirements which took effect on July 8, 2013 taking into account the lessons learned from the TEPCO's Fukushima Daiichi NPP accident and latest technical findings collected from across the world.

We will continue to make an utmost effort to improve the safety and reliability of our nuclear power plants by collecting and analyzing latest technical information collected at home and abroad. At the same time, we set our goal at achieving the world's highest level of safety while pursuing voluntary safety improvement measures on a continuous basis even beyond the framework of the new regulatory requirements.