## Takahama Unit 4 Automatic Reactor Trip (No.2)

February 29, 2016 The Kansai Electric Power Co., Inc.

At Takahama Unit 4 (pressurized water reactor, rated electric output: 870MW), the turbine and reactor automatically shut down at p.m. 14:01:27 today in response to the actuation of "main transformer/generator internal failure" and "PT<sup>\*</sup> failure" alarms following generator trip at p.m. 14:01:26 when actions to connect the generator in parallel were being taken.

Potential causes of the event are currently under investigation.

At Takahama Unit 4, the turbine, generator and reactor are all in a stable shutdown condition.

\*PT: potential transformer

Subsequently, to determine the causes of "main transformer/generator internal failure" alarm which triggered automatic generator trip, the local relay panel was checked for potential components actuating the alarm to find that the detection circuit indicating a main transformer failure was actuated.

This is supposed to have led to the actuation of automatic generator trip circuit, which caused automatic generator trip.

Although the exact causes of "PT failure" alarm actuation are still being investigated, the alarm is usually actuated along with automatic generator trip.

There have been not significant fluctuations in the indications of Takahama Unit 4 vent stack monitor and environmental monitors surrounding Takahama Nuclear Power Station. The event has not caused any radioactive release to the surrounding environment.

Plant operating parameters have been showing stable trends after reactor trip.

Takahama units 3 and 4 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.