

November 19, 2024

**Start-up and resumption of the operation of Mihama Nuclear Power Station Unit 3
(Manual shutdown of the reactor due to reduction in the wall thickness of the seawater
system return main pipe of the device used to cool the primary cooling water)**

The Kansai Electric Power Co., Inc. (Code: 9503)

6-16 Nakanoshima 3-chome, Kita-ku, Osaka

(URL <https://www.kepco.co.jp/>)

Company Representative: Nozomu Mori, Director, Representative Executive Officer, President

Contact: Hironori Kakiguchi, General Manager, Office of Accounting and Finance

Tel: 050-7105-9084

On October 10, 2024, at the Mihama Nuclear Power Station Unit 3 (during constant-rated thermal-power operation), reduction in the wall thickness and tiny holes were confirmed in the seawater system return main pipe※1 (Line C) of the device used to cool the primary cooling water※2. In order to investigate the cause of such defect, the plant was shut down on October 15, 2024.

As a result of the investigation, it was revealed that detachment of the polyethylene lining※3 was found in the defective section of the pipe at the last periodic inspection and was repaired by epoxy resin lining that has low durability to erosion by cavitation※4. From the above, we presume that system operation caused the lining to detach and due to the contact of the defective section of the base material of the pipe with sea water, corrosion and reduction in the wall thickness progressed from the inner side to the outer side of the pipe and pierced a hole.

This pipe was decided to be exchanged to a pipe with polyethylene lining.

- ※1: Pipework to release seawater into the ocean from the outlet of the device used to cool the primary cooling water.
- ※2: A device using seawater to cool the cooling water that is used to remove heat generated by pumps, motors, etc. of the primary system.
- ※3: A lining to prevent corrosion by coating the inner side of the pipe with material such as resin so that the material of the pipe does not come into contact with sea water.
- ※4: A phenomenon in which the abrupt decrease in pressure of the liquid causes air bubbles to locally formulate (cavitation) and when the pressure recovers such air bubbles collapse generating shock waves that may cause damage to material.

[Disclosure was made on October 10, 2024 regarding the manual shutdown of Mihama Nuclear Power Station Unit 3]

On November 21, 2024, following of the completion of the exchange of the pipe and restoration of the operation system, the reactor will be started up and power generation will recommence on the same day.