Overview of Accident at Mihama Nuclear Power Plant, Unit 2

Overview of the accident

On February 9th, 1991, one heat-transfer tube on Unit 2 of Kansai Electric Power's Mihama Nuclear Power Plant ruptured, initiating automatic shutdown of the reactor and activating the Emergency Core Cooling System (ECCS).

The results of the ensuing investigation showed that a fixture designed to suppress vibration to the heat-transfer tube had not been inserted as far it was designed to be, resulting in abnormal vibrations of the tube.

As a result, it was found that this high cycle fatigue (force repeated over 100,000 times) led to the material not being able to withstand the force, and the pipe rupturing.

OImpact on the environment

Although this was the first time in Japan that an emergency core cooling system (ECCS) had been activated due to spillage of primary coolant, the amount of radioactive materials released in the event was negligible and no impacts on the environment were observed.

