To: Dyer NRR
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Due: 8/30/04

From: C. E. (Gene) Carpenter
To: William Outlaw
Date: 8/9/04 4:11PM
Subject: DRAFT for Mihama Press Inquiries - As Requested

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Statement

On Monday, August 9, 2004, at around 3:28 p.m., local time (3:28 a.m. EDT), Kansai Electric Power Company's Mihama Unit 3 experienced a leak in the secondary system piping that returns heated water to the plant's three steam generators. This leak released pressurized water that was approximately 200 C (~392 F). This superheated water flashed to steam, which is reported to have caused fatal burns to four plant workers in the immediate vicinity of the leak, and significant injuries to approximately eleven other workers in the general area.

The Mihama Unit 3 is a three-loop 826 MW pressurized water reactor (PWR) that started commercial operation in December 1976. It was built by Mitsubishi Heavy Industries, Ltd. (MHI). The unit was reported to have been scheduled to enter a 90-day maintenance outage on August 14. Reportedly, it was last inspected on July 15, 2003.

At this time, the cause of the leak is under investigation. No radiation is reported to have been released.

Questions & Answers

Q1. Has such a leak occurred in the U.S.?

A1. Based on our present understanding of the occurrence, a similar case would be the December 1986 failure of the Surry feedwater pump suction piping. This was described in Information Notice (IN) 86-106, "Feedwater Line Break," dated December 16, 1986, and followed up with three Supplements. In short, the 18-inch carbon steel inlet piping to the pump failed while eight workers were replacing insulation on nearby piping. The water flashed to steam, and four of the workers died from the resulting injuries. There was no radiation release. Additional information on NRC and industry response is available in INs 87-36 and 88-17; Bulletin 87-01, "Thinning of Pipe Walls in Nuclear Power Plants," dated July 9, 1987; and, Generic Letter (GL) 89-08, Erosion/Corrosion-Induced Pipe Wall Thinning," dated May 2, 1989.

Q2. Could a similar leak occur in U.S. nuclear power plants?

A2. Based on the information presently available, it appears that this leak is an industrial-type mishap that could occur in any industrial facility with high-pressure and high-temperature water flowing through piping. However, based on U.S. nuclear industry programs that have been in place since the late 1980s, routine inspections have greatly reduced the likelihood of a similar occurrence.

Q3. What actions are the NRC considering following this leak?

A3. The NRC staff is following the investigation into the root cause, and will incorporate applicable lessons learned into our reactor oversight program, as appropriate.

Q4. Has the NRC been asked by the Japanese government to assist?

A4. The NRC maintains an excellent working relationship with the Japanese regulatory authority, and will consider any request.

CC: Anthony McMurtray; Ashok Thadani; Kevin Burke

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