

DCS No: 50336880408  
Date: April 11, 1988

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-88-40

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region I staff on this date.

Facility:  
Northeast Nuclear Energy Co.  
Millstone Nuclear Sta. Unit 2  
Docket No. 50-336  
Waterford, CT

Licensee Emergency Classification:  
 Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

Subject: UNPLANNED PLANT SHUTDOWN IN EXCESS OF 48 HOURS

At 10:37 p.m., April 8, 1988, with a 56-hour downpower maneuver planned to begin at midnight to find and correct 0.8 gpm unidentified primary system leakage, control rod CEA-22 dropped into the core. CEA-22 was declared inoperable at 11:55 p.m., and a normal plant shutdown was undertaken. During control rod insertion, CEA-4 also dropped into the core. By 5:55 a.m., April 9, 1988, all CEAs were fully inserted and the plant was in hot standby.

At 6:20 a.m., April 9, 1988, the Containment was opened. Airborne surveys showed 49 MPC (maximum permissible concentration for unprotected exposure), with Iodine-131 the predominant isotope. Entries were made using respiratory equipment. Leakage from a safety injection system check valve and from a power-operated relief valve (PORV) were assessed by the licensee as significant contributors to the unidentified leakage. The plant was taken to cold shutdown.

Presently, the primary system is at 134 degrees Fahrenheit and 28 psia. Containment airborne radioactivity is less than 1 MPC, with respirators no longer required. Steam generator SG-1 and SG-2 secondary side samples indicate, respectively, radioactivity levels of 1.41E-6 and 1.06E-6 microcuries/milliliter (uCi/ml). (Previous, daily samples were less than the minimum detectable activity of 1E-6 uCi/ml.) Leakage repairs, CEA problem correction, and SG radioactivity concern resolution are being undertaken. The shutdown is expected to last about eight days.

The licensee notified the news media of the shutdown. The State of Connecticut has been informed.

This information is current as of 10:00 a.m. (EDT), April 11, 1988.

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Region I Form 83  
(Rev. March 1988)