

July 21, 2003

Addressees

Purpose

Description of Circumstances

ML031980434

Moisture carryover levels remained above normal, and on June 11, 2003, the licensee shut down QC-2 to inspect the dryer. Inspection of the dryer revealed (1) through-wall cracks (about 90 inches long) in the vertical and horizontal portions of the outer bank hood, 90-degree side, (2) one vertical and two diagonal internal braces detached on the outer bank hood, 90-degree side, (3) one severed vertical internal brace on the outer bank hood, 270-degree side, and (4) three cracked tie bars on top of the dryer. A root cause analysis by the licensee is in progress. The licensee believes the most probable cause of the failure is low-frequency, high-cycle fatigue driven by flow-induced vibrations associated with the higher steam flows present during EPU operating conditions.

Discussion

GE Nuclear Energy and the licensee did not foresee this phenomenon. GE Nuclear Energy, the licensee, and the NRC are evaluating this event with regard to its generic implications for plants that are operating with or planning to apply for an extended power uprate. Licensees should be alert to the possibility of similar unanticipated effects from increasing flow, power, or differential pressure associated with a major modification such as an extended power uprate.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) project manager.

/RA/

William D. Beckner, Chief
Reactor Operations Branch
Division of Inspection Program Management
Office of Nuclear Reactor Regulation

Technical Contacts: Karla Stoedter, Region III
(309) 654-2227
E-mail: kkb@nrc.gov

Jack Foster, NRR
(301) 415-3647
E-mail: jwf@nrc.gov

Fred Lyon, NRR
(301) 415-2296
E-mail: cfl@nrc.gov

Attachment: List of Recently Issued NRC Information Notices

Moisture carryover levels remained above normal, and on June 11, 2003, the licensee shut down QC-2 to inspect the dryer. Inspection of the dryer revealed (1) through-wall cracks (about 90 inches long) in the vertical and horizontal portions of the outer bank hood, 90-degree side, (2) one vertical and two diagonal internal braces detached on the outer bank hood, 90-degree side, (3) one severed vertical internal brace on the outer bank hood, 270-degree side, and (4) three cracked tie bars on top of the dryer. A root cause analysis by the licensee is in progress. The licensee believes the most probable cause of the failure is low-frequency, high-cycle fatigue driven by flow-induced vibrations associated with the higher steam flows present during EPU operating conditions.

Discussion

GE Nuclear Energy and the licensee did not foresee this phenomenon. GE Nuclear Energy, the licensee, and the NRC are evaluating this event with regard to its generic implications for plants that are operating with or planning to apply for an extended power uprate. Licensees should be alert to the possibility of similar unanticipated effects from increasing flow, power, or differential pressure associated with a major modification such as an extended power uprate.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below or the appropriate Office of Nuclear Reactor Regulation (NRR) project manager.

/RA/

William D. Beckner, Chief
Reactor Operations Branch
Division of Inspection Program Management
Office of Nuclear Reactor Regulation

Technical Contacts: Karla Stodter, Region III
(309) 654-2227
E-mail: kkb@nrc.gov

Jack Foster, NRR
(301) 415-3647
E-mail: jwf@nrc.gov

Fred Lyon, NRR
(301) 415-2296
E-mail: cfl@nrc.gov

Attachment: List of Recently Issued NRC Information Notices

DISTRIBUTION:

ADAMS
IN Folder

ADAMS ACCESSION NUMBER: ML031980434

*See previous concurrence

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML031980434.wpd

OFFICE	IROB:DIPM	Tech Editor	PM:PDIII-2	SC:PDIII	SC:EMEB
NAME	JWFoster*	PKleene*	FLyons*	AMendiola*	DTerao*
DATE	07/10/2003	07/08/2003	07/10/2003	07/10/2003	07/10/2003
OFFICE	D:DE	SC:IROB:DIPM	BC:IROB:DIPM		
NAME	RJBarrett*	TReis*	WDBeckner		
DATE	07/17/2003	07/17/2003	07/21/2003		

OFFICIAL RECORD COPY

LIST OF RECENTLY ISSUED
NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
2003-08	Potential Flooding Through Unsealed Concrete Floor Cracks	06/25/2003	All holders of operating licenses or construction permits for nuclear power reactors.
2003-07	Water in the Vent Header/vent Line Spherical Junctions	06/24/2003	All holders of operating licenses for boiling water reactors (BWRs) with a Mark I containment.
2003-06	Failure of Safety-related Linestarter Relays at San Onofre Nuclear Generating Station	06/19/2003	All holders of operating licenses or construction permits for nuclear power reactors, except those that have permanently ceased operations and have certified that fuel has been permanently removed from the reactor.
2003-05	Failure to Detect Freespan Cracks in PWR Steam Generator Tubes	06/05/2003	All holders of operating licenses or construction permits for pressurized-water reactors (PWRs).
2002-15, Sup 1	Potential Hydrogen Combustion Events in BWR Piping	05/06/2003	All holders of operating licenses for light water reactors, except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor.

Note: NRC generic communications may be received in electronic format shortly after they are issued by subscribing to the NRC listserver as follows:

To subscribe send an e-mail to <listproc@nrc.gov>, no subject, and the following command in the message portion:

subscribe gc-nrr firstname lastname