

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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7	R	9	LICENSEE CODE					14	15	LICENCE NUMBER										25	26	LICENSE TYPE					30	57	CAT	58

0 1 REPORT SOURCE 7 6 0 5 0 0 0 2 7 2 7 1 1 2 1 8 2 8 0 6 2 9 8 3 9
7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

On November 21, 1982, during routine refueling operations, video inspection of removed fuel assemblies revealed cladding ruptures on Element 13 in Fuel Assembly D-20. Following completion of inspection of the assembly, it was placed in the Spent Fuel Pit. The integrity of redundant fission product barriers was maintained. The event constituted possible abnormal degradation of the cladding in accordance with Technical Specification 6.9.1.8c.

0 8		7 9		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE	
0 9		7 8		R C (11)		B (12)		B (13)		F U E L X X (14)				Z (15)		Z (16)	
7 8		9 10		11 12		13 14		15 16		17 18		19 20		21 22		23 24	
(17) LEFT REPORT NUMBER		EVENT YEAR		FREQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		25 26		27 28		29 30	
8 2		8 2		0 9 0		0 1		X		1		31 32		33 34		35 36	
21 22		23 24		25 26		27 28		29 30		31 32		33 34		35 36		37 38	
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
C (18) Z (19)		Z (20)		Z (21)		0 0 0 0		Y (23)		Y (24)		N (25)		W 1 2 0		44	
33 34		35 36		37 38		39 40		41 42		43 44		45 46		47 48		49 50	

1 0 Investigation revealed that the failure apparently was due to an isolated instance of
1 1 secondary hydriding. The module was replaced with a substitute assembly, with the
1 2 appropriate changes made to refueling procedures. The failed module will not be used
1 3 in future fuel cycles. The present fuel examination program will continue to surveille
1 4 for any abnormalities during refueling.

7		8		9		FACILITY STATUS		% POWER		OTHER STATUS		METHOD OF DISCOVERY		DISCOVERY DESCRIPTION							
1		5		H		28		0 0 0		29		N/A		B		31		Video Inspection		32	
7		8		9		10		11		12		13		14		15		16		17	
ACTIVITY		CONTENT		RELEASED OF RELEASE		AMOUNT OF ACTIVITY		35		LOCATION OF RELEASE		36									
1		6		Z		33		Z		34		N/A		44		45		46		80	
7		8		9		10		11		12		13		14		15		16		17	
PERSONNEL EXPOSURES		NUMBER		TYPE		DESCRIPTION		39													
1		7		0		0		0		37		Z		38		N/A		44		80	
7		8		9		10		11		12		13		14		15		16		17	
PERSONNEL INJURIES		NUMBER		DESCRIPTION		41															
1		8		0		0		0		40		N/A		44		45		46		80	
7		8		9		10		11		12		13		14		15		16		17	
LOSS OF OR DAMAGE TO FACILITY		TYPE		DESCRIPTION		43															
1		9		Z		42		N/A		44		45		46		47		48		80	

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 PUBLICITY
 ISSUED (44) DESCRIPTION (45)
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 8308030404 830713
 PDR ADOCK 05000272
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 NRC USE ONLY
 68 69 80

NAME OF PREPARER R. Frahm

PHONE (609) 339-4309



PSEG

Public Service Electric and Gas Company P.O. Box E Hancock Bridge, New Jersey 08038

Salem Generating Station

July 13, 1983

Dr. Thomas E. Murley
Regional Administrator
USNRC
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Dr. Murley:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 82-090/01X-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station
Unit No. 1 Technical Specifications, Section 6.9.1.8c,
we are submitting supplemental Licensee Event Report for
Reportable Occurrence 82-090/01X-1.

Sincerely yours,

J. M. Zupko, Jr.
General Manager -
Salem Operations

RF:kls

CC: Distribution

Report Number: 82-090/01X-1
Report Date: 06-29-83
Occurrence Date: 11-21-82
Facility: Salem Generating Station Unit 1
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Fuel Cladding Rupture - Assembly D-20.

This report was initiated by Incident Report 82-427.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 6 - Rx Power 0 % - Unit Load 0 MWe.

DESCRIPTION OF OCCURRENCE:

On November 21, 1982, during routine refueling operations, video inspection of removed fuel assemblies revealed cladding ruptures on Element 13 in Fuel Assembly D-20. The assembly had been in the core for three fuel cycles; it was in Core Location L-3 during the most recent cycle. Following completion of inspection of the assembly, it was placed in Spent Fuel Pit Location E-4. The integrity of the Reactor Coolant and Containment Systems was maintained throughout the occurrence.

APPARENT CAUSE OF OCCURRENCE:

A review of the traceability data did not indicate any trend related to manufacturing that would indicate a tendency toward failure. Rod 13 appears to have failed due to secondary hydriding, without any apparent implications or correlations with respect to other fuel in the reactor or in the same batch. The failure was therefore assumed to be of an isolated nature.

ANALYSIS OF OCCURRENCE:

The fuel cladding is a design feature which insures that radioactive fission products are contained in the fuel elements and not released to the primary coolant or containment atmosphere during normal operation and accidents of moderate or low frequency. The cladding is one of multiple fission product barriers which insure radiation dose to the public in the event of an accident is maintained within the limits of 10CFR100.

Although infrequent and limited failures of the cladding are consistent with fuel design criteria, any rupture possibly constitutes abnormal degradation and is reportable in accordance with Technical Specification 6.9.1.8c. As noted, the integrity of the redundant fission product barriers was maintained. The occurrence therefore did not involve any undue risk to the health or safety of the public.

CORRECTIVE ACTION:

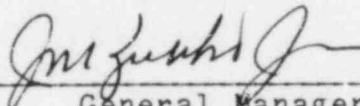
As noted, the assembly involved was transferred to the Spent Fuel Pit. The module will not be utilized in future fuel cycles; appropriate procedural changes were implemented and a suitable replacement module was installed in its place. The present fuel examination program will continue to surveille for any abnormalities during refueling outages. In view of the nature of the failure, no further action was deemed necessary at this time.

FAILURE DATA:

Westinghouse Electric Corp.
Fuel Assembly

A previous cladding failure was discovered in January of 1982 and is documented in LER 82-05/01X-1; the failure was attributed to excessive rod growth due to fuel lockup.

Prepared By R. Frahm



General Manager -
Salem Operations

SORC Meeting No. 83-086