

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 9804140069 DOC. DATE: 98/04/08 NOTARIZED: NO DOCKET #
 FACIL: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251
 AUTH. NAME AUTHOR AFFILIATION
 HOVEY, R. J. Florida Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION
 Document Control Branch (Document Control Desk)

SUBJECT: Provides summary of PL-CRDM housing issue relevant to Units
 3 & 4 & until present plans for addressing it. Util routinely
 performs enhanced RCS leakage rate monitoring at plant.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 3
 TITLE: OR Submittal: General Distribution

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD2-3 LA	1	PD2-3 PD	1
	JABBOUR, K	1		
INTERNAL:	<u>FILE CENTER-01</u>	1	NRR/DE/ECGB/A	1
	NRR/DE/EMCB	1	NRR/DRCH/HICB	1
	NRR/DSSA/SPLB	1	NRR/DSSA/SRXB	1
	NUDOCS-ABSTRACT	1	OGC/HDS3	0
EXTERNAL:	NOAC	1	NRC PDR	1

C
A
T
E
G
O
R
Y

1

D
O
C
U
M
E
N
T

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS
 OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL
 DESK (DCD) ON EXTENSION 415-2083

TOTAL NUMBER OF COPIES REQUIRED: LTTR 13 ENCL 0

12

1
PS
11

11
12
13



APR 08 1998

L-98-088

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington D. C. 20555

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Part Length CRDM Housing Issue

In a letter to Mr. Frank J. Miraglia, Deputy Director, Office of Nuclear Reactor Regulation, dated March 6, 1998¹, the Westinghouse Owners Group (WOG) responded to the NRC's formal request to activate the Regulatory Response Group (RRG) and address concerns regarding the potential generic implications of the part length control rod drive mechanism (PL-CRDM) housing issue identified at Prairie Island Unit 2. That letter documented the information provided by the WOG during a meeting with the NRC on February 27, 1998. At that meeting the WOG presented information regarding the current assessment of the PL-CRDM housing issue and the activities planned to continue to resolve the potential generic concerns. The condition assessment report provided to the NRC emphasized that the incident is isolated, and that it is unlikely to occur in other housings. Furthermore, even if the incident were to occur, and it led to severance of a part length housing, the event has already been considered as part of the plant design basis.

The affected WOG member utilities met on March 2, 1998 to review and discuss the information presented to the NRC. The outcome of this meeting was the formation of a subgroup which will continue to support Westinghouse member utilities in responding to this issue. From the discussions at that meeting, the WOG RRG issued a letter to affected WOG member utilities that recommended utilities voluntarily notify the NRC of their plans to address this issue.

This letter provides a summary of the PL-CRDM housing issue relevant to Turkey Point Units 3 and 4, and FPL's present plans for addressing it.

The through wall leakage identified at Prairie Island Unit 2 from the PL-CRDM at location G-9 was identified by destructive exam to be the result of an initial fabrication flaw and was not a service induced flaw. The flaw was identified as hot cracking of the 309 weld material (heat X1419) in a bi-metallic weld in the pressure housing. This type of fabrication flaw is generally an isolated event. This type of cracking is not considered generic because the weld procedures and qualifications used for ASME nuclear equipment are carefully conceived and extensively tested. These results and conclusions, which were contained in a condition assessment, were transmitted to the NRC from the WOG on March 6, 1998¹. Evidence as to the non-generic nature of the flaw is provided by the following inspection results, which have shown no indications: 7 PL-CRDM housings, also fabricated with weld heat

¹ WOG Letter #OG-98-037, "Westinghouse Owners Group Submittal of Responses to NRC Items for Consideration by the WOG RRG Regarding the Part Length CRDM Housing Issue", WOG to Mr. Frank Miraglia (NRC), March 6, 1998.

9804140069 980408
PDR ADOCK 05000250
PDR

an FPL Group company

A00110



11.11.11

11.11.11

X1419, at Diablo Canyon Unit 2; 4 PL-CRDM housings at Beaver Valley Unit 1; 4 PL-CRDM housings at Beaver Valley Unit 2 (type I82 weld metal); and the 3 additional PL-CRDM housings removed from Prairie Island Unit 2.

FPL is participating in the WOG subgroup to obtain and provide information to resolve the issues related to the PL-CRDM housings. Turkey Point Units 3 and 4 each have 8 PL-CRDM's of similar design and the same fabricator as those at Prairie Island. Records search performed as part of this WOG subgroup indicate that the PL-CRDM housings made for Turkey Point utilized 309 weld material but of a different heat than that used in the leaking Prairie Island housing.

Since the root cause of the PL-CRDM housing flaw at Prairie Island was identified as fabrication induced, with no evidence of an active degradation mechanism in over 20 years of operation, this type of flaw is not likely to have generic implications for the PL-CRDM housings at Turkey Point Units 3 and 4. Even if a similar flaw was postulated to exist at Turkey Point, the WOG condition assessment¹ concluded that the most likely scenario would be a leak. Due to the ductile nature of the materials involved, a leak before break scenario would likely occur.

FPL routinely performs enhanced Reactor Coolant System (RCS) leakage rate monitoring at Turkey Point. In addition to the required Technical Specification surveillances, FPL performs the following activities to track and monitor RCS leakage.

- 1) Operations personnel perform leakage rate calculations once per shift. This activity includes RCS leakage rate trending and containment sump level monitoring.
- 2) The Shift Technical Advisor (STA) independently trends the shiftly leakage rates and the containment radiation monitor readings on a daily basis.
- 3) Leakage rate trending that increases above 0.5 gpm requires that the STA be notified. If the leakage rate increases above 1 gpm, a leak evaluation is initiated to identify the leakage source and evaluate the consequences.
- 4) A visual leak inspection is performed inside the accessible areas of the reactor vessel head cooling shroud every time the unit is reduced to hot standby, Mode 3, provided the inspection has not been performed within 30 days. An inspection of this type was performed on February 16, 1998, with specific attention to the 8 PL-CRDMs of Turkey Point Unit 3, with no evidence of boric acid crystals that would indicate leakage.
- 5) Containment radiation monitors are continuously monitored in the control room with alarms that indicate potential sources of primary leakage in containment.
- 6) Turkey Point maintains a reactor vessel head leakage detection system which is periodically run to assist in leakage detection and can be used to isolate or eliminate the potential source of unidentified leakage.

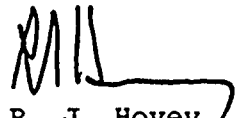
As part of specific actions to increase the awareness of the potential for RCS leakage from a postulated event similar to that at Prairie Island Unit 2, the following additional actions have been completed:

- 1) Documentation was reviewed to verify that licensed operations personnel were recently trained on small break loss of coolant accident (LOCA) emergency procedures. This review indicated that all licensed operations personnel have received small break LOCA training within the past year. Small break LOCA training is included in the licensed operator continuing training program.
- 2) A training brief, describing the Prairie Island event, was prepared for operations personnel to raise the level of awareness of this type of potential leakage.

FPL will continue to participate in the WOG subgroup activities and monitor additional inspection results as they become available. The failure analysis results from the cracked PL-CRDM, and inspection results to date, provide evidence as to the isolated nature of this flaw. Should additional inspection results indicate that a generic issue does exist, FPL will consider appropriate action at that time.

Please contact us with any questions you may have concerning this matter.

Very truly yours,



R. J. Hovey
Vice President
Turkey Point Plant

OIH

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point

10-11-12

10-11-12

10-11-12