

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8010100249 DOC. DATE: 80/10/02 NOTARIZED: NO DOCKET #
 FACIL: 50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moho 05000410
 AUTH. NAME AUTHORITY AFFILIATION
 RHODE, G.K. Niagara Mohawk Power Corp. MAI.
 RECIP. NAME RECIPIENT AFFILIATION
 CARLSON, R.T. Region 1, Philadelphia, Reactor Construction & Engineeri

SUBJECT: Interim deficiency rept re failure of matl in spent fuel pool heat exchangers to meet impact testing spec requirements. Caused by omission of test specimen parameter from impact test data. Safety function may be jeopardized.

DISTRIBUTION CODE: B019S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 3
 TITLE: Construction Deficiency Report (10CFR50.55E)

NOTES:

	RECIPIENT		COPIES		RECIPIENT		COPIES	
	ID CODE/NAME		LTR	ENCL	ID CODE/NAME		LTR	ENCL
ACTION:	A/D. LICENSNG	04	1	1	YOUNGBLOOD, B	05	1	1
	RUSHBROOK, M.	06	1	1	KIPER, K.	07	1	1
INTERNAL:	AD/RCI/IE	17	1	1	AEOD	18	1	1
	ASLBP/J. HARD		1	1	D/DIR HUM FAC15		1	1
	EDO & STAFF	19	1	1	EQUIP QUAL BR11		1	1
	HYD/GEO BR	22	1	1	I&E	09	2	2
	LIC QUAL BR	12	1	1	MPA	20	1	1
	NRC PDR	02	1	1	OELD	21	1	1
	PROC/TST REV	13	1	1	QA BR	14	1	1
	<u>REG FILE</u>	01	1	1	RUTHERFORD, W. IE		1	1
	STANDRDS DEV	21	1	1				
EXTERNAL:	ACRS	16	16	16	LPDR	03	1	1
	NSIC	08	1	1				

OCT 14 1980

TOTAL NUMBER OF COPIES REQUIRED: LTR 40 ENCL 40

R



08 11 1980



NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

October 2, 1980

Office of Inspection and Enforcement
Region I
Attention: Mr. R.T. Carlson, Chief
Reactor Construction and Engineering
Support Branch
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Dear Mr. Carlson:

Re: Nine Mile Point Unit 2
Docket No. 50-410

On September 2, 1980 Mr. R. Feil of your staff was informed by telephone that Niagara Mohawk was evaluating a potential reportable deficiency in accordance with 10CFR50.55(e). This condition involves the failure of certain material in the spent fuel pool heat exchangers to meet specification requirements for impact testing.

The attached interim report is submitted in accordance with Paragraph 50.55(e) (3) of the Commission's regulations. Another report will be provided by December 1, 1980.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

Gerald K. Rhode
Vice President
System Project Management

PEF:bd

3019
S/11 R

8010100 249

5

INTERIM REPORT
SPENT FUEL POOL COOLING WATER HEAT EXCHANGERS
POTENTIALLY REPORTABLE DEFICIENCY 10CFR50.55(e)
DOCKET NO. 50-410

DESCRIPTION OF DEFICIENCY

The potentially reportable deficiency was discovered during a review of the documentation package for the spent fuel pool cooling water heat exchangers.

The impact test data for several heat exchanger shell materials do not contain sufficient information to determine whether or not the purchase specification and ASME Code impact test acceptance criteria are met. Specifically, the acceptance criteria are based on a test specimen parameter called mils lateral expansion. For the heat exchanger carbon steel shell end plates, nozzles, nozzle reinforcing pads, and cradle supports, the impact test data included in the certified material test reports do not report this parameter. Furthermore, the impact test data that are reported for the suspect materials indicate that the material used may be deficient for impact values.

It should be noted that the ASME Code does not require impact testing for Class 3 heat exchangers. However, this was an additional requirement in the purchase specification. The heat exchangers successfully passed a shop hydrostatic test and were ASME III, Class 3, stamped.

It has been confirmed that the information is not available, and that the test specimens were not retained by the testing laboratory, therefore precluding additional testing.

Based on the results of our preliminary investigation, this problem is a reportable deficiency. A review of the records as required by the quality assurance procedures established under 10CFR50, Appendix B, Article XI, Test Control, failed to establish that the testing requirements had been evaluated and documented.

ANALYSIS OF THE SAFETY IMPLICATIONS

The test data provided indicate that the resistance to brittle fracture of some heat exchanger material is sufficiently low to possibly jeopardize the capability of the units to perform their safety function under all operating conditions.



11
12
13
14

CORRECTIVE ACTION

Information regarding the failure of the Quality Assurance Program to detect the problem in the Vendor's shop; an evaluation of the potential for failure of the heat exchangers, and additional data to determine the acceptability of the heat exchangers is being gathered. Initial corrective action to date has been to temporarily reject the affected heat exchangers for use. Also, the spent fuel pool heat exchanger Vendor has been temporarily identified as a supplier who requires increased surveillance. Final corrective action to resolve the problem and to prevent recurrence will be made after the above information is received and analyzed.

