

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:8807270060 DOC.DATE: 88/07/22 NOTARIZED: NO DOCKET #
 FACIL:50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
 AUTH.NAME AUTHOR AFFILIATION
 MORGAN,R.E. Carolina Power & Light Co.
 RECIP.NAME RECIPIENT AFFILIATION

Document Control Branch (Document Control Desk)

SUBJECT: Discusses continuing util investigation of microbiologically induced corrosion in service water piping.

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

NOTES:

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID CODE/NAME		LTTR	ENCL		ID CODE/NAME		LTTR	ENCL
	PD2-1 LA		1	0		PD2-1 PD		5	5
	LO,R		1	1					
INTERNAL:	ARM/DAF/LFMB		1	0		NRR/DEST/ADS 7E		1	1
	NRR/DEST/CEB 8H		1	1		NRR/DEST/ESB 8D		1	1
	NRR/DEST/MTB 9H		1	1		NRR/DEST/RSB 8E		1	1
	NRR/DOEA/TSB 11		1	1		NRR/PMAS/ILRB12		1	1
	NUDOCS-ABSTRACT		1	1		OGC 15-B-18		1	0
	<u>REG FILE</u> 01		1	1		RES/DSIR/EIB		1	1
EXTERNAL:	LPDR		1	1		NRC PDR		1	1
	NSIC		1	1					

TOTAL NUMBER OF COPIES REQUIRED: LTTR 22 ENCL 19

R
I
D
S
/
A
D
S

R
I
D
S
/
A
D
S



Carolina Power & Light Company

ROBINSON NUCLEAR PROJECT DEPARTMENT
POST OFFICE BOX 790
HARTSVILLE, SOUTH CAROLINA 29550

JUL 22 1988

Robinson File No: 13510

Serial: RNP/88-3170

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

REFERENCE: Serial: RNP/88-1004

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
MICROBIOLOGICALLY INDUCED CORROSION

Gentlemen:

This letter is in regards to our continued investigation concerning Microbiologically Induced Corrosion (MIC) in Service Water piping. As scheduled in our letter of March 3, 1988, radiography of the baseline welds was performed during April 1988. In addition to the baseline sampling program, several additional welds were selected for inspection. Specifically, five additional 3-inch welds were inspected in the Containment Building and six additional 6-inch welds in the Auxiliary Building were included in the sampling. The 3-inch welds were chosen to provide a broader sampling of this diameter piping. The 6-inch welds were examined as a followup to the work performed in January and February of 1988, as reported previously.

From the April radiography of the 41 sample welds, an average growth rate of 0.57 inches per year was determined by taking the difference of the average total indications between the December 1987 and the April 1988 inspections and multiplying by three to obtain an annual rate. This growth rate is similar to that previously reported. No weld from the April sampling exhibited a cumulative MIC growth that exceeded the structural limit.

As previously reported in inspection status letters since January 1987, MIC indications have been identified in the sleeve fillet weld area. The April 1988 radiography more clearly defined the location of the indications. Of the 41 welds in the sampling, eight Containment Building welds exhibited MIC growth outside of the sleeve adjacent to the fillet weld. Due to the containment integrity concerns raised by these indications, an Engineering Evaluation has been developed to justify continued reactor operation until the 1988 Refueling Outage. The Service Water piping in the Containment Building whose internal pressure is less than the containment pressure during a Design Basis Accident will be replaced or repaired during the 1988 Refueling Outage, thereby eliminating this Service Water-related containment integrity concern.

8807270060 880722
PDR ADOCK 05000261
P PDC

Accol 1/0

Based on the followup actions required by the evaluation, a revised quarterly surveillance program will be implemented. This program will include a quarterly visual leak inspection of Service Water piping welds in the sample plan that are in the Containment Building. This inspection will be supplemented by the weekly leak examination of the Containment Building piping currently being performed by Plant Operations personnel. The weekly leak inspections assure prompt detection and corrective action. The revised program also includes quarterly radiography surveillance of Service Water piping welds in the Auxiliary Building and will focus on 1) unsleeved welds and 2) longitudinal and fillet weld areas of sleeved welds. Radiography of all sleeved and unsleeved Service Water piping welds in the Auxiliary Building will be completed on a yearly basis.

The radiography surveillance of Service Water piping welds in the Auxiliary Building will provide a larger data base and should be representative of the Service Water piping welds in the Containment Building. Structural integrity is not a concern with the Containment Building welds since the recent sampling shows low MIC growth in the sleeve weld areas and no welds close to the structural defect limit. Therefore, utilizing Auxiliary Building weld radiography data to estimate the structural condition of the Containment Building Service Water welds is appropriate due to similar material and MIC-causing service environment. Also, by discontinuing radiography of Service Water piping welds in the Containment Building, personnel exposure will be reduced without degrading the effectiveness of the surveillance program. The revised surveillance program will begin in July 1988.

The administrative sleeving limit of 6.0 inches and the structural limit of 12.0 inches for 6-inch piping will continue in effect for operability determinations. Additionally, criteria for 3-inch piping inside the Containment Building have been established to ensure that piping operability is maintained when subjected to design loads.

Administrative sleeving limit:

Pipe-to-fitting joints = 1.48 inches
Pipe-to-pipe joints = 2.26 inches

Structural limit:

Pipe-to-fitting joints = 2.96 inches
Pipe-to-pipe joints = 4.52 inches

Letter to USNRC
Serial: RNPD/88-3170
Page 3

Should you have any question, please contact Mr. J. M. Curley, (803) 383-1367.

Very truly yours,



for R. E. Morgan
General Manager
H. B. Robinson S. E. Plant

DAS:jch

cc: Dr. J. N. Grace
Mr. L. W. Garner
INPO