

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8905100086      DOC. DATE: 89/04/28      NOTARIZED: NO      DOCKET #  
 FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315  
 AUTH. NAME      AUTHOR AFFILIATION  
 POSTLEWAIT, T.K.      Indiana Michigan Power Co. (formerly Indiana & Michigan Ele  
 SMITH, W.G.      Indiana Michigan Power Co. (formerly Indiana & Michigan Ele  
 RECIP. NAME      RECIPIENT AFFILIATION

SUBJECT: LER 89-005-00: on 890330, inoperable containment isolation valve for component cooling water sys.

W/8      ltr.

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	AEOD/DSP/TPAB	1	1		AEOD/ROAB/DSP	2	2	
	DEDRO	1	1		IRM/DCTS/DAB	1	1	
	NRR/DEST/ADE 8H	1	1		NRR/DEST/ADS 7E	1	0	
	NRR/DEST/CEB 8H	1	1		NRR/DEST/ESB 8D	1	1	
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	NRR/DLPQ/HFB 10	1	1		NRR/DLPQ/QAB 10	1	1	
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	L ST LOBBY WARD	1	1		LPDR	1	1	
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **D. C. Cook Nuclear Plant, Unit-1** DOCKET NUMBER (2) **05000315** PAGE (3) **1 of 02**

TITLE (4) **Inoperable Containment Isolation Valve for Component Cooling Water System**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
03	30	89	89	005	00	04	28	89			050000
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											

OPERATING MODE (9)	6	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	000	20.406(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.406(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
		20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(vii)(A)	
		20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(vii)(B)	
		20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **T. K. Postlewait - Technical Engineering Superintendent** TELEPHONE NUMBER **616 465-5901**

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS
X	C	S H V	L 2 0 0	Y					

SUPPLEMENTAL REPORT EXPECTED (14)  YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15) **06 09 89**

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 30, 1989, with Unit 1 in Mode 6 (refueling), during surveillance testing, Containment isolation valve (1-CCM-458) would not close as required by Technical Specification 3.6.3.1. This valve isolates the Component Cooling Water Supply to the Reactor Coolant Pump Coolers.

Inspection of the valve operator gearbox revealed that the threads on the worm gear had been stripped and the driven gear was also damaged. The valve is infrequently operated; therefore, the failure could not be attributed to severe service. The point of failure was not at either end of stem travel; therefore, overtorquing was ruled out. It could not be determined what caused the gear failure, however a flaw in the gear tooth is the most likely cause.

The Safety Evaluation for this event is not complete at this time. An updated report will be submitted by June 9, 1989, to include the Safety Evaluation findings.

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PDR ADOCK 05000315  
S PDC

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FACILITY NAME (1)  D. C. Cook Nuclear Plant, Unit-1	DOCKET NUMBER (2)  0   5   0   0   0   3   1   5	LER NUMBER (8)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
		8   9	-   0   0   5	-   0   0	0   2	OF 0   2

TEXT (If more space is required, use additional NRC Form 305A's) (17)

Description of Event:

On March 30, 1989, with Unit 1 in Mode 6 (refueling), during surveillance testing, Containment isolation valve (1-CCM-458) (EIIS:SHV) would not close as required by Technical Specification 3.6.3.1. This valve isolates the Component Cooling Water Supply (EIIS:CC) to the Reactor Coolant Pump Coolers.

During valve operation, 1-CCM-458 would partially close until the torque switch sensed an excessive torque condition. Manual operation of the valve was possible but difficult.

Cause of Event:

Inspection of the valve operator gearbox revealed that the threads on the worm gear had been stripped and the driven gear was also damaged. The valve is infrequently operated; therefore, the failure could not be attributed to severe service. The point of failure was not at either end of stem travel; therefore, overtorquing was ruled out. It could not be determined what caused the gear failure, however a flaw in the gear tooth is the most likely cause.

Analysis of Event:

The Safety Evaluation for this event has not been completed at this time. An updated report will be submitted by June 9, 1989, to include the Safety Evaluation findings.

Corrective Actions:

The valve operator was repaired by replacing the defective components.

Failed Component Identification:

Plant I.D. No: 1-CCM-458 Valve Operator  
 Manufacturer: Limitorque Corporation  
 Model No: SMB00  
 EIIS Code: L200

Previous Similar Events:

There were no similar previous events.

Indiana Michigan  
Power Company  
Cook Nuclear Plant  
P.O. Box 458  
Bridgman, MI 49106  
616 465 5901



April 28, 1989

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

Operating License DPR-58  
Docket No. 50-315

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73  
entitled Licensee Event Reporting System, the following  
report is being submitted:

89-005-00

Sincerely,

A handwritten signature in black ink, appearing to read 'W. G. Smith, Jr.', written in a cursive style.

W. G. Smith, Jr.  
Plant Manager

WGS:clw

Attachment

cc: D. H. Williams, Jr.  
A. B. Davis, Region III  
M. P. Alexich  
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J. E. Borggren  
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A. A. Blind  
S. J. Brewer/B. P. Lauzau

Handwritten initials 'JE2' in black ink, with a vertical line extending downwards from the '2'.