

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 7903210009 DOC. DATE: 79/03/16 NOTARIZED: NO DOCKET #  
 FACIL: 50-305 KEWAUNEE NUCLEAR POWER PLANT, WISCONSIN PUBLIC SERVICE 05000305  
 AUTH. NAME AUTHOR AFFILIATION  
 RUITER, G.H. ~~YANKEE ATOMIC ELECTRIC CO. WPSC~~  
 RECIP. NAME RECIPIENT AFFILIATION  
 REGION 3, CHICAGO, OFFICE OF THE DIRECTOR

SUBJECT: LER 79-004/03L-0 ON 790216: DURING STEADY STATE FULL POWER  
 OPERATION, DIESEL GENERATOR 1A FAILED TO START DURING  
 OPERABILITY TEST. CAUSED BY BROKEN ROTOR VANE IN PRIMARY AIR  
 START MOTOR. MOTORS REPLACED.

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	09 I&E	2	2	11 MPA	3	3
	14 TA/EDO	1	1	15 NOVAK/KNIEL	1	1
	16 EEB	1	1	17 AD FOR ENGR	1	1
	18 PLANT SYS BR	1	1	19 I&C SYS BR	1	1
	20 AD PLANT SYS	1	1	21 AD SYS/PROJ	1	1
	22 REAC SAFT BR	1	1	23 ENGR BR	1	1
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	29 ACRS	16	16			

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WISCONSIN PUBLIC SERVICE CORPORATION



P.O. Box 1200, Green Bay, Wisconsin 54305

March 16, 1979

Mr. J. G. Keppler, Regional Director  
Office of Inspection & Enforcement  
Region III  
U.S. Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn IL 60137

Dear Mr. Keppler:

Docket 50-305  
Operating License DPR-43  
Reportable Occurrence LER 79-004/03L-0

In accordance with the requirements of Technical Specifications, Section 6.9, the attached Licensee Event Report for reportable occurrence LER 79-004/03L-0 is being submitted.

Very truly yours,

A handwritten signature in cursive script that reads "E. R. Mathews".

E. R. Mathews  
Vice President  
Power Supply & Engineering

dl

*dup of 7903210006*

Attach.

cc: ✓ Dir, Office of Inspection & Enforcement  
US NRC, Washington, D.C. 20555  
Dir, Office of Mgt Info & Program Control  
US NRC, Washington, D.C. 20555

*4002  
5/11*

## LICENSEE EVENT REPORT

CONTROL BLOCK: 1 6 1

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 W I K N P 1 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5  
7 8 9 14 15 25 26 30 57 CAT 58

CON'T

0 1 REPORT SOURCE L 6 0 5 0 0 0 3 0 5 7 0 2 1 6 7 9 8 0 3 1 6 7 9 9  
7 8 60 61 68 69 74 75 80

## EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10

0 2 During steady full power operation D/G 1A failed to start during an operability test,  
0 3 placing the facility under LCO TS 3.7.b.2. D/G 1B was tested to confirm operability.  
0 4 Repairs to D/G 1A were completed within TS required time interval and the D/G was re-  
0 5 turned to service. D/G 1B was inspected for similar equipment problems and needed  
0 6 refurbishing was performed. Since one D/G and offsite power remained available during  
0 7 this occurrence, there was no effect on plant operation or public safety.

0 8 7 8 9 80

0 9 SYSTEM CODE E E 11 CAUSE CODE E 12 CAUSE SUBCODE B 13 COMPONENT CODE M O T O R X 14 COMP. SUBCODE Z 15 VALVE SUBCODE Z 16  
7 8 9 10 11 12 13 18 19 20  
17 LER/RO REPORT NUMBER 7 9 21 22 23 24 26 27 28 29 30 31 32  
ACTION TAKEN C 18 FUTURE ACTION G 19 EFFECT ON PLANT Z 20 SHUTDOWN METHOD Z 21 HOURS 0 0 0 0 22 ATTACHMENT SUBMITTED Y 23 NPD-4 FORM SUB. Y 24 PRIME COMP. SUPPLIER N 25 COMPONENT MANUFACTURER W 1 2 0 26  
33 34 35 36 37 40 41 42 43 44 47

## CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27

1 0 A broken rotor vane jammed the primary D/G air start motor. Since this condition  
1 1 permitted air flow, a start signal was not generated for the secondary air start motor.  
1 2 The D/G 1A air start motors were replaced and those for D/G 1B were refurbished.  
1 3 Corrosion resulting from moisture in the startup air is believed to have contributed  
1 4 to this failure. Revisions will be made to OPS and PM procedures intended to minimize  
7 8 9 80

1 5 FACILITY STATUS E 28 % POWER 1 0 0 29 NA OTHER STATUS 30 METHOD OF DISCOVERY B 31 DISCOVERY DESCRIPTION 32 Operability Test  
7 8 9 10 12 13 44 45 46 80  
1 6 ACTIVITY CONTENT Z 33 RELEASED OF RELEASE Z 34 NA AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36 NA  
7 8 9 10 11 44 45 80

1 7 PERSONNEL EXPOSURES NUMBER 0 0 0 37 TYPE Z 38 DESCRIPTION 39 NA  
7 8 9 10 11 12 13 80

1 8 PERSONNEL INJURIES NUMBER 0 0 0 40 DESCRIPTION 41 NA  
7 8 9 10 11 12 80

1 9 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION 43 NA  
7 8 9 10 11 12 80

2 0 PUBLICITY ISSUED N 44 DESCRIPTION 45 NA  
7 8 9 10 11 12 80

NAME OF PREPARER G. H. Ruiter

PHONE: (414) 433-1329

ATTACHMENT TO LER 79-004/03L-0

Wisconsin Public Service Corporation

Kewaunee Nuclear Power Plant

Docket 50-305

Operating License DPR-43

Event Description

During steady full power operation D/G 1A failed to start during an operability test due to a failure of the air start motors. This placed the facility under LCO TS 3.7.b.2 and D/G 1B was tested as required to assure operability. Repairs to D/G 1A were completed and the D/G was tested and returned to service within the time interval specified by TS. During follow-up investigation, the air start motors on D/G 1B were inspected and needed refurbishment was performed. Since one D/G and off-site power remained available for the duration of this occurrence there was no effect on plant operation or public safety.

Cause Description and Corrective Actions

The rotor of the primary air start motor for D/G 1A failed such that a piece of a vane jammed the motor. Since this condition still permitted air flow through the motor, a signal was not initiated by the control logic to activate the secondary air start motor. The air start motors for D/G 1A were replaced and the D/G was tested and returned to service. Inspection of the air motors for D/G 1B indicated signs of wear and needed refurbishment was performed. The D/G 1A primary air start motor internals were found to be rusted. Moisture in the D/G startup air supply is believed to have contributed to this failure. Operations procedures have been revised to decrease the time interval between blow downs of the D/G startup air receivers to once daily with the intent of minimizing the startup air moisture content. The appropriate PM procedures will be revised to include inspection of the air start motor internals on a frequency intended to prevent future failures of this type.