

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 9328

FILE:

FROM: Wisconsin Public Service Corp Green Bay Wis 54305 EW James		DATE OF DOC 9-6-74		DATE REC'D 9-10-74		LTR XX	TWX	RPT	OTHER
TO: Mr. O'Leary		ORIG 1 signed		CC	OTHER	SENT AEC PDR XX SENT LOCAL PDR XX			
CLASS.	UNCLASS XXXX	PROP INFO	INPUT	NO CYS REC'D 1		DOCKET NO: 50-305			
DESCRIPTION: Ltr re Abnormal Occurrence concerning failure of two electrically driven pumps to start from manual initiation until the third attempt.					ENCLOSURES: ACKNOWLEDGED DO NOT REMOVE				
PLANT NAME: Kewaunee									

FOR ACTION/INFORMATION

9-10-74 ent

BUTLER (L)	SCHWENCER (L)	ZIEMANN (L)	REGAN (E)
W/ CYS	W/ CYS	W/ CYS	W/ CYS
CLARK (L)	STOLZ (L)	DICKER (E)	LEAR
W/ CYS	W/ CYS	W/ CYS	W/ CYS
FAER (L)	MISSALLO (L)	KNIGHTON (E)	
W/ CYS	W/ CYS	W/ CYS	W/ CYS
KNIEL (L)	✓PURPLE (L)	YOUNGBLOOD (E)	
W/ CYS	W/4 CYS	W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

✓ REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
✓AEC PDR		GRIMES	DIGGS (L)	BRAITMAN
✓OGC	✓SCHROEDER	GAMMILL	GEARIN (L)	SALTZMAN
✓MUNTZING/STAFF	✓MACCARY	KASTNER	GOULBOURNE (L)	B. HURT
✓CASE	✓KNIGHT	BALLARD	KREUTZER (E)	
GIAMBUSSO	✓PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	✓SHAO		MAIGRET (L)	MCDONALD
MOORE (L)(LWR-2)	✓STELLO	ENVIRO	REED (E)	CHAPMAN
DEYOUNG (L)(LWR-1)	✓HOUSTON	MULLER	✓SERVICE (L)	DUBE w/input
SKOVHOLT (L)	✓NOVAK	DICKER	✓SHEPPARD (L)	E. COUPE
GOLLER (L)	✓ROSS	KNIGHTON	SLATER (E)	
P. COLLINS	✓IPPOLITO	YOUNGBLOOD	SMITH (L)	✓D. THOMPSON (2)
DENISE	✓TEDESCO	REGAN	TEETS (L)	✓KLECKER
✓REG OPR	✓LONG	PROJECT MGR	WILLIAMS (E)	✓EISENHUT
FILE & REGION (2)	✓LAINAS		WILSON (L)	
✓MORRIS	✓BENAROYA	HARLESS		
✓STEELE	✓VOLLMER			

EXTERNAL DISTRIBUTION

✓1 - LOCAL PDR Kewaunee, WI	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/WY
✓1 - TIC (ASERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
✓1 - NSIC (BUCHANAN)	1-W. PENNINGTON, Rm E-201 GT	1-G. ULRIKSON, ORNL
1 - ASLB	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSMAN, Rm B-127 GT)
1 - Newton Anderson	1-CONSULTANTS	1-ED MUELLEN
✓5 - ACRS SENT TO LIC ASST Sheppard	NEWARK/BLUME/AGBARIAN	

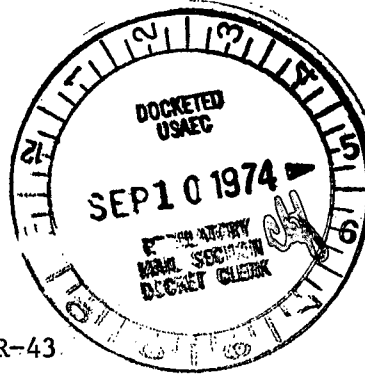
WISCONSIN PUBLIC SERVICE CORPORATION



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

September 6, 1974

Mr. J. F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545



Dear Mr. O'Leary:

Subject: Docket 50-305
Operating License DPR-43
Unusual Event
Auxiliary Feedwater Pumps

In accordance with the requirements of Technical Specifications, paragraph 6.6.2.b.2, we submit the following:

Introduction

The Kewaunee Nuclear Power Plant employs three auxiliary feedwater pumps, two are electrically driven and the third is steam driven. The auxiliary feedwater system is an engineered safeguards system and is required to be tested periodically in accordance with the requirements of the Technical Specifications, Section 4.8. The operability of each pump is required to be demonstrated monthly during power operation. This is being accomplished under an approved surveillance test procedure.

The auxiliary feedwater pumps start automatically on any of the following signals:

Motor-Driven Pumps

- a. Safety Injection
- b. Blackout
- c. Low-low level (2/3) in either steam generator starts both pumps
- d. Opening of both feedwater pump circuit breakers

Turbine-Driven Pump

- a. Low-low level in both steam generators
- b. Loss of voltage on both 4 KV buses

All three pumps have manual start capability.

September 6, 1974

Problem

During the monthly surveillance test of the two electrically driven pumps, it was discovered that the pumps did not start from manual initiation until the third attempt. To better understand the problem, the operation of the pumps is described as follows:

During "Manual" start, the operator turns the control switch to "Start" which in turn starts the auxiliary oil pump. When the oil pump has been energized for at least 10 seconds and the oil pressure reaches a set value, a pressure switch closes to energize the start circuit for the auxiliary feedwater pumps. The operator had been turning the switch to "Start," verified that the auxiliary oil pump started, then allowed the switch to spring return to "Auto." This did not allow the oil pressure to reach the value required to start the auxiliary feedwater pumps. It should be noted that during automatic start of the pumps, this condition would not occur since the start signal noted above would remain in the circuit until the condition was cleared, which would exceed the approximate 10 seconds required to raise the oil pressure to the value required to start the auxiliary feedwater pumps.

Corrective Action

To provide assurance that this condition would not re-occur, an extensive investigation was made to determine the cause of the pumps not starting and to determine the proper corrective action that should be taken. The pumps were subjected to several manual start operations and observations made of the various parameters. In addition to the control switch operation noted above, it was discovered that the level of the oil reservoir should be operated at a higher value. When the pump started, the oil level fell below the elevation of the pump suction and air was drawn into the lubrication system causing partial loss of pump suction. Partial loss of suction tended to increase the time required to reach the preset pressure.

To assure that correct oil levels are maintained in the oil reservoir, level gauges are being marked to quickly denote the correct oil levels that have to be maintained. In addition the procedures are being revised to provide assurance that oil levels are checked and during manual start of the pumps, the operator verify full start capability of the pumps prior to release of the switch.

Sincerely,



E. W. James, Senior Vice President
Power Generation & Engineering

EWJ:sna

cc - Mr. James G. Keppler, US AEC - Region III
Mr. Dwane Boyd, US AEC - Res. Insp. Region III