AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 6687

FILE:

FROM:	DATE OF DOC	DATE REC'D	LTR	TWX	RPT	OTHER
Wisconsin Public Service Co. Green Bay, WI E. W. James	7-19-74	7-22-74	X			

TO:	ORIG	CC	OTHER	SENT AEC PDR XXX SENT LOCAL PDR XXX
J. F. O'Leary	1 signed			

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			1	50-305

DESCRIPTION:

Ltr furn info re abnormal occurrence Rpt # 50-305/74-8 of 7-9-74 re observed inadequacy of procedural controls.....

ENCLOSURES:

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME: KEWAUNEE

FOR ACTION/INFORMATION 7-22-74 GMC

BUTLER (L) W/ CYS	SCHWENCER (L) W/ CYS	ZIEMANN (L) W/ CYS	REGAN (E) W/ CYS
CLARK (L) W/ CYS	✓STOLZ (L) W/ 7 CYS	DICKER (E) W/ CYS	LEAR W/ CYS
[illegible] (L) W/ CYS	[illegible] (L) W/ CYS	[illegible] (E) W/ CYS	W/ CYS
KNIEL (L) W/ CYS	PURPLE (L) W/ CYS	YOUNGBLOOD (E) W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

✓REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
✓AEC PDR	✓HENDRIE	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 (3)	✓LAINAS		WILSON (L)	
✓MORRIS	✓BENAROYA	HARLESS		
✓STEELE	✓VOLLMER			

EXTERNAL DISTRIBUTION

LB

✓1 - LOCAL PDR KEWAUNEE, WI	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
✓1 - TIC (ABERNATHY)	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 GUSSMAN) Rm B-127 GT
✓1 - P. R. DAVIS	1-CONSULTANTS	
✓16 - ACRS SENT TO LIC ASST SMITH 7-23-74	NEWMARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-[illegible] GT

WISCONSIN PUBLIC SERVICE CORPORATION

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

July 19, 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
Abnormal Occurrence Report

In accordance with the requirements of Technical Specifications, paragraphs 1.0a.1 (e) and 6.6.2.a, we submit the following:

Report Number

50-305/74-9

Report Date

July 19, 1974

Occurrence Date

July 9, 1974

Facility

Kewaunee Nuclear Power Plant
Kewaunee, Wisconsin

Identification of Occurrence

Steam leak from pressurizer level instrument

Conditions Prior to Occurrence

Reactor not critical. Conducting reactor coolant system integrity test.
Normal Operating Temperature 547°F
System Operating Pressure 2335 psig

Description of Occurrence

Reactor coolant integrity test (SP-087) was being performed in accordance with Technical Specifications Section 4.3. Inspectors in the containment reported a steam leak near the pressurizer. The leak was coming from pressurizer level sensor LT-428. The instrument was isolated and repairs are presently underway. The channel will remain out of service until repairs are completed. No abnormal exposure of personnel was experienced.

Description of Apparent Cause of Occurrence

Unknown

6685

Analysis of Occurrence

Failure of the bellows and gasket in the pressurizer level sensor allowed the fluid from the sensing line to leak into the containment. This was a component failure. Health Physics personnel took readings and no abnormal exposure of personnel occurred.

The instrument was isolated and the integrity test continued to completion. The reactor was in a shutdown condition, therefore, no fission products were being generated. No damage occurred to any system, component or structure. No personnel injuries were sustained. An air sample was taken by Health Physics and the following fission products were measured:

Gross $\beta-\delta$	$= 5.12 \times 10^{-9}$ μc/cc
Radon	$= 1.00 \times 10^{-9}$ μc/cc
Cobalt 60	$= 1.18 \times 10^{-10}$ μc/cc
Molybdenum 99	$= 1.63 \times 10^{-10}$ μc/cc
Chromium 51	$= 1.09 \times 10^{-9}$ μc/cc
Iodine 132	$= 1.24 \times 10^{-9}$ μc/cc
Cobalt 58	$= 3.29 \times 10^{-9}$ μc/cc
Manganese 54	$= 2.81 \times 10^{-10}$ μc/cc

The containment building exhaust air sampler for the period of July 2 through July 9 provided the following activities:

Gross $\beta-\delta$	$= 1.43 \times 10^{-12}$ μc/cc
Gross Alpha	$= 3.90 \times 10^{-13}$ μc/cc
Radon 222	$= 4.87 \times 10^{-13}$ μc/cc
Iodine 131	$= 3.28 \times 10^{-12}$ μc/cc

The consequences from a standpoint of public health and safety were non-existent. The potential consequences were minimal, since the release from the instrument was contained in the containment. The diameter of the sensing line to the instrument is 3/8". A break in an instrument line of 1/2 inch or less can be overcome by one charging pump. In this case it was observed that while the leak existed the primary coolant system volume did not change and that one charging pump provided the necessary makeup water. If the leak would have gone undetected, the operator would have several indications denoting a leak. These are high humidity; increasing sump level, or more frequent operation of sump pumps; one charging pump on continuously or possibly a second pump required to maintain makeup; high radiation; loss of coolant system pressure; and increasing containment pressure.

Therefore, no hazard to the public health and safety existed.

Corrective Action Taken

There are three pressurizer level sensors which feed the reactor protection system and provide a two out of three coincidence circuit. This channel out of

service is in the tripped condition, therefore, should any one of the two remaining level channels reach its trip point, the reactor will be automatically shut down. We are presently in the process of obtaining a new bellows and gasket and will have the level sensor repaired by the nuclear steam system vendor using approved procedures. The level measuring system will be hydrostatically tested prior to placing the sensor into service.

Failure Data

This is the first incident of this type of failure on this plant. The level transmitter is a Barton Type P386/351, rated at 2500 psig and 140°F.

Very truly yours,

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

EWJ:sna

cc - Mr. James G. Keppler