

FILE:

FROM: Wisconsin Public Service Corp Green Bay, Wis 54305 ErW James		DATE OF DOC 9-13-74	DATE REC'D 9-17-74	LTR XXX	TWX	RPT	OTHER
TO: Mr O'Leary		ORIG 1 signed	CC	OTHER	SENT AEC PDR XX SENT LOCAL PDR XXX		
CLASS.	UNCLASS XXXXXX	PROP INFO	INPUT	NO CYS REC'D 1	DOCKET NO: 50-305		
DESCRIPTION: Ltr re Abnormal Occurrence #74-15 on 9-4-74 concerning a fuel element developed a leak.....				ENCLOSURES: ACKNOWLEDGED DOWNSIDE			
PLANT NAME: Kewaunee							

FOR ACTION/INFORMATION 9-17-74 ehf

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

INTERNAL DISTRIBUTION

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

EXTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> 1 - LOCAL PER <u>Kewaunee, WI</u>			
<input checked="" type="checkbox"/> 1 - TIC (ASERNATHY)	(1)(2)(10)-NATIONAL LABS		1-PDR-SAN/LA/AY
<input checked="" type="checkbox"/> 1 - NSIC (BUCHANAN)	1-ASLBP (E/W Bldg, Rm 529)		1-BROOKHAVEN NAT LAB
<input checked="" type="checkbox"/> 1 - ASLB	1-W. PENNINGTON, Rm E-201 GT		1-G. ULRICKSON, ORNL
<input checked="" type="checkbox"/> 1 - Newton Anderson	1-B&M SWINEBROAD, Rm E-201 GT		1-AGMED (RUTH GUSMAN)
<input checked="" type="checkbox"/> 5 - ACRS SENT TO LIC ASST <u>Sheppard</u>	1-CONSULTANTS		Rm B-127 GT
	NEWARK/BLIME (ACHARIN)		

WISCONSIN PUBLIC SERVICE CORPORATION



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

Regulatory Docket File

September 13, 1974



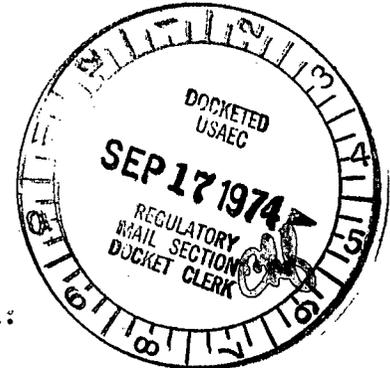
Mr. J. F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. O'Leary:

Subject: Docket 50-305
Operating License DPR-43
Abnormal Occurrence Report

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

Report Number: 50-305/74-15
Report Date: September 13, 1974
Occurrence Date: September 4, 1974
Facility: Kewaunee Nuclear Power Plant
Kewaunee, Wisconsin
Identification of Occurrence: A fuel element developed a leak:
Condition Prior to Occurrence: Reactor at power - 100%
Normal Operating Temperature, 560°F
Normal Operating Pressure, 2235 psig
Normal Charging and Letdown
Description of Occurrence: Primary coolant samples taken on August 26, 1974
showed an increase in activity by a factor of 1000
in I-131 and 100 in I-133. Other isotopes of iodine
showed corresponding increases.
Sampling frequency and analyses were increased to
determine if a fuel element developed a leak.



On September 4, 1974, it was confirmed that a fuel element had developed a leak. This confirmation was delayed because on August 27, 1974, the plant tripped and subsequent return to power masked the analyses.

On September 4, 1974, the occurrence was discussed with the Resident Inspector.

Description of Apparent Cause of Occurrence:

No indications of clad creep are present, and only normal operating transients have been undertaken. No apparent cause for the failure can be identified.

Analysis of Occurrence:

On August 26 a gross iodine level in the primary coolant system was measured as 4.65×10^{-1} microcuries per milliliter. This was a factor of almost 100 increase from the level on August 23. The I-131/I-133 ratio had also changed from 0.07 to 0.62. Sampling frequency was increased to determine if the activity and activity ratios had stabilized. The activity peaked on August 26 and was starting to decrease toward an equilibrium on August 27 when the plant tripped from an unrelated cause. The subsequent activity excursion after plant restart masked final determination of isotope ratios until September 3, when it appeared the I-131/I-133 ratio was approaching an equilibrium value of 0.62, the theoretical value for a fission product diffusion source. This approach to equilibrium was confirmed September 4 and the Resident Inspector informed.

Our Environmental Consultants were contacted on August 28 for analysis of our site and off-site environmental samplers. The results indicated no unplanned releases to the environment between the days of August 21 and September 4. Based on these analyses, we can conclude that no potential hazard to the public health and safety existed.

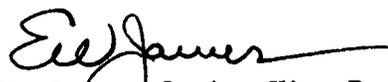
Corrective Action:

The plant equipment is being utilized to maintain the primary activity level to as low as practical levels and increased surveillance of the primary coolant is continuing.

Failure Data:

The activity levels indicate that on the order of one pin has ruptured and no gross fuel failure has occurred.

Very truly yours,



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

EWJ:sna

cc - Mr. James G. Keppler, US AEC
Mr. Dwane Boyd, US AEC - Resident Inspector