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 FACIL:50-287 Oconee Nuclear Station, Unit 3, Duke Power Co.
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 LEWIS,S,R. Duke Power Co.
 RECIP.NAME RECIPIENT AFFILIATION
 Region 2, Atlanta, Office of the Director

DOCKET #
 05000287

SUBJECT: LER 80-001/03L-0: on 800201, borated water storage sys level
 channel 2 failed high when level transmitter 3LT-6 froze.
 Caused by failure of neutral wire in power cable. Wire
 replaced. Cable will be replaced.

DISTRIBUTION CODE: A002S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2+1
 TITLE: Incident Reports

NOTES: M. CUNNINGHAM - ALL AMENDS TO FSAR & CHANGES TO
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	18 PLANT SYS BR	1	1	19 I&C SYS BR	1	1
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MAR 25 1980

TOTAL NUMBER OF COPIES REQUIRED: LTTR

53

52

ENCL

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DUKE POWER COMPANY
OCONEE UNIT 3

Report Number: RO-287/80-1

Report Date: February 29, 1980

Occurrence Date: February 1, 1980

Facility: Oconee 3, Seneca, South Carolina

Identification of Occurrence: BWST Level Instrument Failure

Conditions Prior to Occurrence: 100% Full Power

Description of Occurrence:

At 0710 on February 1, 1980, a borated water storage tank (BWST) high level alarm on level Channel 2 was received in the Oconee 3 Control Room. An investigation revealed that the strip heaters in the transmitter box for BWST level transmitter 3LT-6 were off and that the level transmitter had frozen. The trace heating circuits for the impulse lines were operating properly. The transmitter was thawed, and work began on the heaters. It was discovered that the neutral wire in the cable to the heaters had failed. Repairs were made, and the level channel was declared operable by 1500 on February 1.

Apparent Cause of Occurrence:

The BWST level Channel 2 transmitter froze when the cable supplying power to the strip heaters for the transmitter failed. The cable had been cut early in January, and it is possible that a faulty splice led to the failure of the neutral wire.

Analysis of Occurrence:

During the time level Channel 2 was out of service, redundant Channel 1 was operable and capable of providing information on the BWST level. In addition, Oconee Nuclear Station Technical Specification 3.3.5 permits one train of BWST level indication to be inoperable for up to 24 hours. Channel 2 was returned to service less than eight hours after it was discovered to be inoperable. However, this incident constituted operation in a degraded mode permitted by a limiting condition for operation and must therefore be reported pursuant to Technical Specification 6.6.2.1.b(2), although it was of no significance with respect to safe operation, and the health and safety of the public were not affected.

Corrective Action:

The immediate corrective action was to thaw the level transmitter. The open neutral wire in the cable to the transmitter's strip heaters was then discovered, and it was replaced with the spare conductor in the cable. A calibration check for the level transmitter was performed, and level Channel 2 was declared operable. The cable for the strip heaters will be replaced. In addition, a low temperature alarm will be installed in each Control Room to alert operations personnel to problems with the heaters.

LICENSEE EVENT REPORT

EXHIBIT A

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01	S	C	N	E	E	13	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					31	32	33	34	35	36	37	38	39	40
LICENSEE CODE			LICENSE NUMBER					LICENSE TYPE					CAT 58																

CONT

01	L	6	0	5	0	0	0	2	8	7	7	0	2	0	1	8	0	8	0	2	2	9	8	0	9
7	8	9	60					61	65					66	74					75	80				
REPORT SOURCE			DOCKET NUMBER					EVENT DATE					REPORT DATE												

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 BWST level Channel 2 failed high when level transmitter 3LT-6 froze. The
03 level channel was returned to service well within the time allowed by Techni-
04 cal Specification 3.3.5. In addition, redundant level Channel 1 remained
05 operable. Therefore, this incident is considered to be of no significance
06 with respect to safe operation, and the health and safety of the public were
07 not affected.

09	P	C	11	E	12	A	13	I	N	S	T	R	U	14	T	15	Z	16	8	0	0	0	1	0	3	L	0	0	0	0	Y	Y	L	B	0	4	0										
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SYSTEM CODE			CAUSE CODE			CAUSE SUBCODE			COMPONENT CODE					COMP. SUBCODE			VALVE SUBCODE			EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRO-1 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
LER/RO REPORT NUMBER			EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.		ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRO-1 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER																		

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The level transmitter froze when the neutral wire in the power cable to the
11 transmitter's strip heaters failed. The wire was replaced with the spare
12 conductor in the cable. The cable will be replaced, and a low temperature
13 alarm will be installed in each Control Room to alert operations personnel to
14 problems with the heaters.

15	E	28	1	0	0	29	NA	30	A	31	Operator Observation	32		33	Z	34	Z	35	NA	36	NA	37	0	0	0	38	Z	39	NA	40	0	0	0	41	NA	42	Z	43	NA	44	N	45	NA							
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FACILITY STATUS			% POWER			OTHER STATUS			METHOD OF DISCOVERY			DISCOVERY DESCRIPTION			ACTIVITY RELEASED			AMOUNT OF ACTIVITY			LOCATION OF RELEASE			PERSONNEL EXPOSURES NUMBER			TYPE			DESCRIPTION			PERSONNEL INJURIES NUMBER			DESCRIPTION			LOSS OF OR DAMAGE TO FACILITY TYPE			DESCRIPTION			PUBICITY ISSUED			DESCRIPTION		

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