

LICENSEE EVENT REPORT (LER)

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|---|--------|-----------|----------------|-------------------|-----------------|--------|-----------------|------------------|----------------------|-------------------------------|--------|---|-------------------------------|-------------------------------|-------|---|-----------|---|-------------------|---|---|---|---|
| FACILITY NAME (1) Kewaunee Nuclear Power Plant | | | | | | | | | | | | DOCKET NUMBER (2) 0 5 0 0 0 3 0 5 1 OF 0 2 | | | | PAGE (3) 1 OF 0 2 | | | | | | | |
| TITLE (4) Inadvertent Start of Both Diesel Generators | | | | | | | | | | | | | | | | | | | | | | | |
| EVENT DATE (5) | | | LER NUMBER (6) | | | | REPORT DATE (7) | | | OTHER FACILITIES INVOLVED (8) | | | | | | | | | | | | | |
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH | DAY | YEAR | FACILITY NAMES NA | | | | DOCKET NUMBER(S) 0 5 0 0 0 | | | | | | | | | | |
| 0 | 4 | 2 | 0 | 8 | 4 | 8 | 4 | 0 | 0 | 7 | 0 | 0 | 0 | 5 | 1 | 8 | 8 | 4 | 0 | 5 | 0 | 0 | 0 |
| THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11) | | | | | | | | | | | | | | | | | | | | | | | |
| OPERATING MODE (9) | | N | | 20.402(b) | | | | 20.406(e) | | | | X 60.73(a)(2)(iv) | | | | 73.71(b) | | | | | | | |
| POWER LEVEL (10) | | 0 0 1 0 | | 20.406(a)(1)(i) | | | | 60.36(a)(1) | | | | 60.73(a)(2)(iv) | | | | 73.71(e) | | | | | | | |
| | | | | 20.406(a)(1)(ii) | | | | 60.36(a)(2) | | | | 60.73(a)(2)(vii) | | | | OTHER (Specify in Abstract below and in last NRC Form 308A) | | | | | | | |
| | | | | 20.406(a)(1)(iii) | | | | 60.73(a)(2)(iii) | | | | 60.73(a)(2)(viii)(A) | | | | | | | | | | | |
| | | | | 20.406(a)(1)(iv) | | | | 60.73(a)(2)(iv) | | | | 60.73(a)(2)(viii)(B) | | | | | | | | | | | |
| | | | | 20.406(a)(1)(v) | | | | 60.73(a)(2)(iii) | | | | 60.73(a)(2)(ix) | | | | | | | | | | | |
| LISCENSEE NAME Sherry Bernhoft - Plant Technical Support Engineer | | | | | | | | | | | | | | | | | | THIS LER (12) TELEPHONE NUMBER AREA CODE 4 1 4 3 8 8 - 2 5 6 0 | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | | | | | | | | |
| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRC | | | | |
| A | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | |
| SUPPLEMENTAL REPORT EXPECTED (14) | | | | | | | | | | | | | | EXPECTED SUBMISSION DATE (15) | | MONTH | DAY | YEAR | | | | | |
| YES (If yes, complete EXPECTED SUBMISSION DATE) | | | | | | | | | | | | | | X NO | | NA | | | | | | | |
| ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16) | | | | | | | | | | | | | | | | | | | | | | | |
| <p>At 0105 on April 20, 1984, with the plant in a refueling shutdown mode, alarms 4703175 "Diesel Gen 1B Engine Abnormal" and 4702921 "Diesel Gen 1A Engine Abnormal" were received in the control room and the operators noticed that both diesel generators were running.</p> <p>Investigation revealed that the diesel generator start was caused by an electrician installing a conduit to the Turbine Equipment Terminal Box "A". During the process he jarred the panel causing a mercooid switch to actuate relay no. 63/AST-3 "Reactor Auto Stop Trip" resulting in a reactor trip signal and diesel generator automatic start.</p> <p>After investigating the cause, the diesel generators were secured and the individual involved and electrical foreman were cautioned. This is an isolated event for design change work, hence, no further follow up action is required.</p> | | | | | | | | | | | | | | | | | | | | | | | |
| 8405230179 840518 PDR ADDCK 05000305 S PDR | | | | | | | | | | | | | | | | | | | | | | | |

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO 3150-0104

EXPIRES 8/31/85

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|---|--|----------------|-------------------|-----------------|----------|----|-----|
| FACILITY NAME (1) Kewaunee Nuclear Power Plant | DOCKET NUMBER (2) 0 5 0 0 9 3 0 5 | LER NUMBER (6) | | | PAGE (3) | | |
| | | YEAR | SEQUENTIAL NUMBER | REVISION NUMBER | | | |
| | | 8 4 | — 0 0 7 | — 0 0 | 0 2 | OF | 0 2 |

TEXT (If more space is required, use additional NRC Form 365A's) (17)

At 0105 on April 20, 1984, with the plant in a refueling shutdown mode, alarm (ALM) 4702921 "Diesel Gen 1A Engine Abnormal" and 4703175 "Diesel Gen 1B Engine Abnormal" were received in the Control Room and the operators noticed that both diesel generators (DG) were running. The engine abnormal alarms were generated by low starting air pressure which is normal for a diesel generator start as the air start receiver (RCV) blows down. The alarm cleared a few minutes after the air compressors (CMP) started.

Investigation revealed that the diesel generator start was caused by an electrician connecting a conduit (CND) to the Turbine Equipment Terminal Box "A" (MBX) as a part of a design change to install a new turbine supervisory instrument panel (PL) in the control room. During the process of installing the conduit, the individual jarred the terminal box causing the mercoid switches (PDS) for relays (RLY) 63/AST-3 and 63/TB-1 to actuate. Relay 63/TB-1 "Thrust Bearing Pressure Switch" resulted in a Sequence of Event Recorder (AE) alarm, "TB, Thrust Bearing, High Wear". Relay 63/AST-3 "Reactor Auto Stop Trip" provides a signal for reactor trip circuitry should the power level be above 10%, and also initiates a diesel generator automatic start. The diesel generator automatic start feature is to ensure turbine lube oil would be immediately available from an a/c powered lube oil pump (P) should a loss of power be experienced during a turbine coastdown. After investigating the cause of the auto start the diesel generators were secured.

Turbine Equipment Terminal Box "A" is located in front of the high pressure turbine (TG), there are several conduits connected to the box and many mercoid switches mounted on the front and side of it. During refueling the HP Turbine cover is removed from the front of the turbine and this area is accessible to work in but very crowded. While the electrician was installing the conduit he bumped into the switches or jarred the panel which caused the very sensitive mercoid switches to actuate.

Under refueling conditions, there was no impact on the plant other than an inadvertant start of the diesel generators. Under operating conditions of greater than 10% power this event would have resulted in a plant trip in addition to a diesel generator start. If other switches mounted on the panel had been actuated the results would be other alarms related to the turbine or trip signals. The switch for relay 63/AST-3 is the only one that results in the auto start of the diesel generators.

After discovering the cause of the incident the electrician involved and the contract foreman were cautioned. This is considered an isolated event for the design change work, hence, no further action is required at this time. Future work in this confined area will be looked at to determine if these mercoid switches can be bypassed.

WISCONSIN PUBLIC SERVICE CORPORATION



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

May 18, 1984

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Gentlemen:

Docket 50-305
Operating License DFR-43
Kewaunee Nuclear Power Plant
Reportable Occurrence 84-007-00

In accordance with the requirements of 10 CFR 50.73 "Licensee Event Report System", the attached Licensee Event Report for reportable occurrence 84-007-00 is being submitted.

Very truly yours,

Charles A. Schack for

C. W. Giesler
Vice President - Power Production

JGT/jks

Attach.

cc - INPO Records Center
Suite 1500, 1100 Circle 75 Parkway
Atlanta, GA 30339
Mr. Robert Nelson, NRC Resident Inspector
RR #1, Box 999, Kewaunee, WI 54216
Mr. S. A. Varga, Chief
US NRC, Washington, DC 20555
Mr. J. G. Keppler, Regional Administrator
Region III, US NRC, 799 Roosevelt Road
Glen Ellyn, IL 60137

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