US NUCLEAR REGULATORY COMMISSION NAC 'Form 304 APPROVED OMB NO 3150-0104 EXPIRES 8/31/85 LICENSEE EVENT REPORT (LER) DOCKET NUMBER (2) FACILITY NAME IT 1 OF 012 0 15 10 10 10 13 10 15 Kewaunee Nuclear Power Plant TITLE (4) Inadvertent Start of Both Diesel Generators OTHER FACILITIES INVOLVED (8) REPORT DATE (7) LER NUMBER (8) EVENT DATE IS DOCKET NUMBERIS BEQUENTIAL DAY MONTH DAY VEAR MACRAT NA 0 | 5 | 0 | 0 | 0 NA 0 15 10 10 10 1 8 4 0 0 0 5 0 4 2 0 8 4 8 4 00 THIS REPORT IS SUBMITTED FURSUANT TO THE REQUIREMENTS OF 10 CFR & (Check one or more of the following) (11) OPERATING 73.71(b) 80 73(a)(2)(iv) 79.77(4) 80 73(a)(2)(v) 20 406(+)(1)(1) 80 38(elf1) OTHER (Specify in Abstract below and in lest NRC Form 366A) 80 73(a)(2)(vil) 60 36 ich(2) 01010 20 405(4)(1)(9) 80 73(a)(2)(viii)(A) 20 406(4)(1)((()) 80 73mi(21til 50 73(a)(2)(e)(()(B) 20 406(a)(1)(iv) 80 73(a)(2)(ii) 80 73(a)(2)(a) 20 406(4)(1)(4) 80 73(a)(2)(iii) THIS LER ITE LICENSEE TELEPHONE NUMBER NAME AREA CODE Sherry Bernhoft - Plant Technical Support Engineer 3 | 8 | 8 | - | 2 | 5 | 6 | 0 41114 COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IT THIS REPORT (13) TO NPROS TO NPROS MANUFAC MANUFAC TURER COMPONENT CAUSE SYSTEM SYSTEM CONPONENT A SUPPLEMENTAL REPORT EXPECTED (14) MONTH DAY YEAR EXPECTED YES III ves complete EXPECTED SUBMISSION DATE! NA

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.

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 mercoid switch to actuate relay no. 63/AST-3 "Reactor Auto Stop Trip" resulting in a reactor trip signal and diesel generator automatic start.

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.

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ABETRACT (Limit to 1400 speces in approximately fifteen single spece typewritten lines) (18)

NRC Form 366A	LICENSEE EVENT REPORT (LER) TEXT CONTINUATION					US NUCLEAR REGULATORY COMMISSION APPROVED OMB NO 3150 0104 EXPIRES 8/31/85					
FACILITY NAME (1)		DOCKET NUMBER (2)	LER NUMBER (6)					PAGE (3)			
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Kewaunee Nuclear Pow	er Plant	0 5 0 0 0 3 0 5	8 4		0 0 1 7		010	012	OF	0 12	

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/TB0-1 "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,

Clords a School for

C. W. Giesler Vice President - Power Production

JGT/jks

Attach.

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