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DUKE POWER

April 20, 1990

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

Subject: McGuire Nuclear Station Unit 2
Docket No. 50-370
Licensee Event Report 370/90-03

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report 370/90-03 concerning a missed Technical Specification Surveillance on the 2B Diesel Generator caused by deficient communication. This report is being submitted in accordance with 10 CFR 50.73(a)(2)(i). This event is considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

T.L. McConnell
T.L. McConnell

DVE/ADJ/cbl

Attachment

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MC-815-04
(20)

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) McGuire Nuclear Station, Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 7 0										PAGE (3) 1 OF 05																																																	
TITLE (4) Diesel Generator Surveillance Was Missed Because Of A Management Deficiency Caused By Deficient Communication																																																																					
EVENT DATE (5)									LER NUMBER (6)									REPORT DATE (7)									OTHER FACILITIES INVOLVED (8)																																										
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POWER LEVEL (10) 1 0 0										20.402(b)										20.406(c)										50.73(a)(2)(iv)										73.71(b)																													
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										20.406(a)(1)(ii)										50.36(a)(2)										50.73(a)(2)(vi)										OTHER (Specify in Abstract below and in Text, NRC Form 366A)																													
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LICENSEE CONTACT FOR THIS LER (12)																																																																					
NAME Alan Sipe, Chairman, McGuire Safety Review Group																				TELEPHONE NUMBER 7 0 4 8 7 5 - 4 1 8 3																																																	
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																																					
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YES (If yes, complete EXPECTED SUBMISSION DATE)																				X NO																																																	

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 14, 1990, Instrumentation and Electrical (IAE) personnel were scheduled to perform the 7 day surveillance on the Unit 2 Diesel Generator (D/G) batteries as required by Technical Specifications (TSs). Because of a Management Deficiency caused by deficient communication the surveillance was not performed on D/G battery 2EDGB until March 16, 1990. This was in violation of the requirement to perform the surveillance once per 7 days. Unit 2 was in Mode 1 (Power Operations) at 100 percent power at the time the event occurred. Appropriate cautions will be added to the preventative maintenance work requests and appropriate personnel will receive training to prevent recurrence of similar events.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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McGuire Nuclear Station, Unit 2	0 5 0 0 0 3 7 0 9 0	—	0 0 3	—	0 0	0 2	OF 0 5

TEXT (If more space is required, use additional NRC Form 306A's) (17)

EVALUATION:

Background

Each unit at McGuire Nuclear Station has two independent D/Gs [EIIS:DG]. As part of the Essential Power System [EIIS:EB], they provide standby AC power to the equipment required to safely shutdown the Reactors [EIIS:RCT] in the event of a major accident and to maintain the facility in the shutdown or refueling condition for extended periods of time. The D/Gs are required in a Blackout (loss of normal power) condition as well as a Blackout and Loss of Coolant Accident (LOCA) condition.

Each D/G has a 125 VDC Diesel Generator Control Power System [EIIS:EJ] (EPQ) which provides power to the Class 1E 125 VDC D/G fuel oil booster pump [EIIS:P], generator [EIIS:GEN] field flashing, and the control loads necessary for proper diesel starting operation during a blackout and/or LOCA conditions. The EPQ system is designed as a unit system and is comprised of Diesel Generator Battery Chargers [EIIS:BYC] and 125 VDC Batteries [EIIS:BY] which serve each D/G respectively. Each 125 VDC battery is sized to carry its duty cycle load without its battery charger for approximately 30 minutes during D/G operation.

TS 4.8.1.1.4a states that each D/G 125 VDC battery bank and charger shall be demonstrated operable at least once per 7 days by verifying that:

- 1) the electrolyte level of each battery is above the plates, and
- 2) the overall battery voltage is greater than or equal to 125 volts under a float charge.

Description of Event

On February 27, 1990, Planning personnel generated Work Requests 03576B, 03577B, 03578B, and 03579B to perform the weekly preventative maintenance periodic test (PM/PT) on D/G Batteries EDGA and EDGB for both units. This is in compliance with the weekly surveillance required by TS 4.8.1.1.4a. These work requests were scheduled by Planning personnel to be performed on March 14, 1990, by IAE Shift personnel.

On March 14, 1990, IAE Management personnel made the decision to have an IAE day crew perform these PM/PTs since Shift personnel were working on valves [EIIS:V] that were needed for returning the Residual Heat Removal system [EIIS:BP] (ND) to service at that time.

The IAE day crew personnel were then given the PM/PT work requests by the IAE Shift personnel. The day crew was under the control of IAE Technician A since the normal day crew supervisor was absent at that time. No verbal communication was given from IAE Management personnel to IAE Technician A concerning the priority of performing the work that day.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-104
EXPIRES: 8/31/88

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TEXT (If more space is required, use additional NRC Form 386A's) (17)

Upon receiving the PM/PT work requests, IAE Technician A distributed them to appropriate personnel on the crew to perform the work. Again, there was no communication concerning the importance of performing the work that day because IAE Technician A was unfamiliar with this surveillance and had not been informed of the urgency. IAE personnel then carried the work requests for Unit 2 D/G batteries EDGA and EDGB to the Control Room [EII:NA] Senior Reactor Operator (SRO) for permission to begin work. The SRO granted permission to perform the surveillance on battery 2EDGA but did not grant permission for battery 2EDGB. The SRO stated that there was work on going at that time which made the "A" Train Annulus Ventilation System [EII:VD] (VE) equipment inoperable and that he did not want to jeopardize the operability (indirectly) of "B" train by allowing work on the "B" D/G.

IAE personnel then performed the surveillance on battery 2EDGA and returned to the IAE shop. Upon their return, IAE personnel gave the work request for battery 2EDGB back to IAE Technician A. Since none of these personnel were familiar with the time requirement associated with the weekly surveillance the work request was put in a stack with the other unfinished work for that days schedule and no further action was taken at that time.

Later that day, the IAE Day Crew Supervisor A returned and IAE Technician A turned the schedule with the unfinished work requests over to him. No communication took place about the work request for battery 2EDGB and since IAE Day Crew Supervisor A was also unfamiliar with the time requirement for the weekly D/G battery surveillance, because it is normally performed by IAE Shift personnel, he took no action at that time.

On March 16, 1990, the IAE Day Crew Supervisor B who was working on nights found the work request for 2EDGB on the IAE Day Crew Supervisor A's desk. At that time, he recognized that the surveillance had not been performed. He immediately gave the work request to appropriate personnel and the surveillance was consequently performed. However, the surveillance was not performed within its allotted time (once per 7 days). Planning personnel generated Problem Investigation Report (PIR) number 2-M90-0085 to investigate the event.

Conclusion

This event is assigned a cause of Management Deficiency because of Deficient Communication. IAE Management personnel did not communicate adequately with IAE Technician A when they made the decision to have the Day Crew perform the weekly D/G battery surveillances. The decision was made in an effort to resolve a manpower problem which occurred because of the need to complete work critical to the Unit 1 outage.

The weekly surveillances on the D/G batteries are normally performed by IAE Shift personnel. IAE Day Crew personnel are not familiar with the task and did not realize that the surveillances had to be performed on the day they received them to ensure that the 7 day requirement of the TS is met. IAE Management personnel did not follow up to see that the surveillances were performed.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (If more space is required, use additional NRC Form 300A's) (17)

When IAE Day Crew Supervisor A returned, no communication took place about the schedule and therefore, he failed to recognize that the weekly D/G battery surveillances had been added to the schedule and needed his attention. Day Crew Supervisor A stated that he did not recognize the urgency of the tasks since the D/G work performed by the IAE Day Crew is normally handled by IAE Day Crew Supervisor B who was not present at that time. There was no late date or caution printed on the PM/PT work requests other than "Potential Tech Spec". Because of their unfamiliarity with performing the weekly D/G battery surveillances, IAE personnel involved failed to recognize the fact that these surveillances have to be performed by the "next date" given on the work request as stated by Station Directive 3.2.1, Identifying and Scheduling of Plant Surveillance Testing. Therefore, since no specific "late date" was printed on the work request, they failed to take the required action.

As a result of this incident, the PM/PT work requests for the D/G battery weekly surveillances will be enhanced to include appropriate cautions to IAE personnel performing the tasks of the time requirement associated with performance of the surveillance. Also, IAE Management personnel will review the event with all appropriate IAE personnel. All appropriate IAE personnel will receive training on the time requirements for TS surveillances.

A contributing factor to the event was the fact that OPS personnel did not grant permission to begin work on battery 2EDGB when initially asked by IAE personnel. OPS personnel took what they considered to be a conservative precaution to protect equipment when they refused to grant permission to begin work on battery 2EDGB. Even though the PM/PT work request was marked "Potential Tech Spec", the SRO did not realize that this was a required weekly TS surveillance. However, there has been no evidence of the weekly D/G battery surveillances making a D/G inoperable. These surveillances are normally performed every week and the tasks involved usually do not jeopardize operability of the D/Gs. OPS Management personnel will review the event with all appropriate OPS personnel emphasizing Station Directive 3.2.0, Conduct Of Periodic Surveillance Program, paragraph 5.1.5.

A review of the Operating Experience Program (OEP) data base for the previous twenty-four months revealed ten events, LERs 369/88-23, 369/89-03, 369/89-11, 369/89-14, 369/89-16, 370/89-08, 370/90-12, 370/90-13, 369/90-05, and 370/90-02 that identified missed TS surveillances. Also in-progress LER 369/90-03 involves a missed TS surveillance. There is no common link between these events. Therefore, this event is not considered recurring but the problem of missed TS surveillances in general is considered to be recurring.

This event is not Nuclear Plant Reliability Data System (NPRDS) reportable.

There were no personnel injuries, radiation overexposures, or uncontrolled releases of radioactive material as a result of this incident.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104
EXPIRES 8/31/88

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

CORRECTIVE ACTIONS:

- Immediate: IAE personnel performed the surveillance on D/G battery 2EDGB per work request 03579B.
- Subsequent: None
- Planned:
- 1) Planning personnel will enhance the PM/PT work requests for the D/G battery weekly surveillances to include appropriate cautions of the time requirement associated with performance of the surveillance.
 - 2) IAE Management personnel will review the event with all appropriate IAE personnel.
 - 3) Appropriate IAE personnel will receive training on the time requirements for TS surveillances.
 - 4) OPS Management personnel will review the event with all appropriate OPS personnel emphasizing Station Directive 3.2.0, Conduct of Periodic Surveillance Program, paragraph 3.1.5.
 - 5) McGuire Safety Review Group personnel will evaluate the effectiveness of the "Potential Tech Spec" statement on PM/PT work requests.

SAFETY ANALYSIS:

During the time period of this event, the ability to safely shutdown the facility and to mitigate the consequences of an accident was maintained by the availability of the Offsite Power System. Also, the subsequent performance of the surveillance found no problems with D/G battery 2EDGB; therefore, it can be concluded that the D/G would have performed its design function. During the time period of this event, there were no challenges to any safety related systems. Therefore, this incident had no effect on the operation of any safety related device.

This incident did not affect the health and safety of the public.