

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 0 5**

TITLE (4) **Both Trains Of The Annulus Ventilation System Were Made Inoperable Due To Deficient Communication And Planning/Scheduling Dificiencies**

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	DOCKET NUMBER (5)		
0	5	2	7	8	8	8	8	8	N/A	0 5 0 0 0		
0	5	2	7	8	8	8	8	8		0 5 0 0 0		

OPERATING MODE (9) **3** THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)

20.402(b)	20.406(e)	90.73(a)(2)(iv)	73.71(b)
20.408(a)(1)(i)	90.38(a)(1)	90.73(a)(2)(v)	73.71(a)
20.408(a)(1)(ii)	90.38(a)(2)	90.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)
20.408(a)(1)(iii)	X 90.73(a)(2)(i)	90.73(a)(2)(vii)(A)	
20.408(a)(1)(iv)	90.73(a)(2)(ii)	90.73(a)(2)(vii)(B)	
20.408(a)(1)(v)	90.73(a)(2)(iii)	90.73(a)(2)(viii)	

LICENSEE CONTACT FOR THIS LER (12) **Steven E. LeRoy, Regulatory Compliance** TELEPHONE NUMBER **7 0 4 3 7 3 - 6 2 3 3**

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRPDS

SUPPLEMENTAL REPORT EXPECTED (14) YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15) MONTH DAY YEAR

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

On 05/27/88, at approximately 1630, Unit 2 unknowingly entered the action statements of Tech Spec (TS) 3.0.3 when both trains of the Annulus Ventilation (VE) system became inoperable during a Unit 2 shutdown activity. On 05/26/88, in a Unit 2 outage scheduling meeting, Integrated Scheduling (IS), Operations (OPS), and Instrumentation and Electrical (IAE) Management concurred that temporary Controlled Access Door (CAD) readers could be installed outside the entrances to the upper and lower containment CADs while Unit 2 was operating if VE operability was not violated. This activity was scheduled as an operational activity. The CAD readers were installed by IAE; therefore, inadvertently violating VE operability. OPS logged Unit 2 into and out of TS 3.0.3 on 05/28/88, because the CADs were continuously monitored by Security, and Security was provided with tools to cut the cables, enabling them to close the doors upon request by OPS. Also, OPS had commenced Shutdown of Unit 2 for the refueling outage. This event is assigned a Cause of Management Deficiency because of deficient communication and planning/scheduling deficiencies. This event will be reviewed with applicable personnel to stress the importance of adequate communications and accurate work request evaluations. Planning will revise the request for installation of the CAD readers to require OPS clearance prior to beginning work and require a temporary modification.

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TEXT (If more space is required, use additional NRC Form 308a (1/77))

INTRODUCTION:

On May 27, 1988, at approximately 1630, Unit 2 unknowingly entered the action statements of Technical Specification (TS) 3.0.3 when both trains of the Annulus Ventilation (VE) system [EIIIS:VC] became inoperable during a Unit 2 shutdown activity. On May 26, 1988 in a Unit 2 refueling outage scheduling meeting, Integrated Scheduling, Operations (OPS), and Instrumentation and Electrical (IAE) Management personnel concurred that temporary Controlled Access Door (CAD) readers could be installed outside the entrances to the upper and lower containment CADs while Unit 2 was operating only if VE operability was not violated. This activity was scheduled as an operational activity, but there is no way to install the temporary CAD readers without the cables penetrating the CADs. The temporary CAD readers were installed by IAE personnel as scheduled; therefore, inadvertently violating VE operability. TS 3.0.3 specifies measures to be taken for those circumstances not directly provided for in the action statements and whose occurrence would violate the intent of a specification. OPS personnel logged Unit 2 into and out of TS 3.0.3 on May 28, at 1002 because the CADs were continuously monitored by Security personnel, and Security personnel were provided with tools to cut the cables, enabling them to close the doors upon request by OPS personnel. Also, OPS personnel had commenced Shutdown of Unit 2 for the refueling outage.

Unit 2 was in Mode 3, Hot Standby, at the time of this event.

This event has been assigned a Cause of Management Deficiency because of deficient communication and planning/scheduling deficiencies. Prior to the start of the refueling outage, Integrated Scheduling, OPS and IAE Management personnel discussed whether or not the temporary CAD readers could be installed while the unit was operating, and from this discussion, it was concluded that the temporary CAD readers could be installed while the unit was operating only if VE operability was not violated. OPS personnel believed the temporary CAD readers could be installed without the cables penetrating the doors.

The work request that the Construction and Maintenance Department IAE crew supervisor used to install the temporary CAD readers requires only the signature of Security personnel to begin work, and it indicates that the equipment was available in Mode 5, Cold Shutdown, and Mode 6, Refueling. However, the equipment availability section of the work request is used only as a scheduling aid.

EVALUATION:

Background

The VE system is designed to produce and maintain a negative pressure in the Annulus following a Loss of Coolant Accident (LOCA), minimizing the release of radioisotopes following a LOCA by filtration and recirculation, and to provide long-term fission product removal capability.

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

There are two independent VE systems for each unit. TS 3.6.1.8 specifies that two independent VE systems be operable in Mode 1, Power Operation, Mode 2, Startup, Mode 3, and Mode 4, Hot Shutdown.

Work request are selected and scheduled based on equipment availability, work force availability, critical path, and outage schedules. Integrated Scheduling (ISC) personnel conduct a refueling outage meeting on a daily basis during the outage with all work groups represented to discuss the status of activities that are listed on the Outage schedule.

Description of Event

On May 26, 1988 at approximately 1500, a refueling outage meeting was conducted by ISC personnel to discuss with station personnel work activities that could be performed prior to the outage. In this meeting there was discussion among ISC, OPS, and IAE Management personnel concerning whether or not temporary CAD readers could be installed on CADs 321 and 621 while the unit was operating. At the conclusion of the discussion, ISC, OPS, and IAE personnel concurred that the temporary CAD readers could be installed while the unit was operating only if VE operability was not violated.

On the morning of May 27, 1988, a Construction and Maintenance Department IAE crew supervisor obtained verbal permission from Security (SEC) personnel to begin installing the temporary CAD readers. SEC personnel accompanied the IAE work crew through the duration of the job. At approximately 1630, SEC personnel informed OPS personnel that they were opening CADs 321 and 621, and OPS personnel declared the doors inoperable and initiated a fire watch for those doors.

Sometime during the night shift OPS personnel discovered that the temporary CAD reader cables were penetrating CADs 321 and 631 and the doors were incapable of being closed. OPS personnel retroactively logged Unit 2 into TS 3.0.3 from May 27, 1988 at 1630, which is the time the fire watch was initiated for CADs 321 and 621.

On May 28, 1988 at approximately 1000, OPS personnel made an informal notification to the Nuclear Regulatory Commission in reference to both trains of the VE system being inoperable because the CADs were open and incapable of being closed. At approximately 1002, OPS personnel declared both trains of the VE system operable and logged Unit 2 out of TS 3.0.3 because SEC personnel were continuously monitoring the CADs and would be provided with tools to cut the cables, enabling them to close the doors on request from OPS personnel.

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TEXT (If space above is required, use additional NRC Form 308A) (17)

Conclusion

This event has been assigned a Cause of Management Deficiency because of deficient communication among the work groups and planning/scheduling deficiencies. One objective of the refueling outage meetings is to inform the representatives from the station groups that are involved in the outage about the status of work activities being performed during the outage and work activities that could be performed prior to the start of the outage.

Online installation of the temporary CAD readers was discussed at the outage meeting prior to the start of the outage. At the conclusion of the discussion, IAE, ISC, and OPS Management personnel concurred that the temporary CAD readers could be installed while the unit was operating only if VE operability was not violated. OPS personnel believed that the temporary CAD readers could be installed without the cables penetrating the doors. This work activity was scheduled as an operational activity, but there is no way to install the temporary CAD readers without the cables penetrating the CADs. The Outage schedule was not revised. The work request that was used by IAE personnel to install the temporary CAD readers did not require clearance from OPS to begin work. Clearance to begin work was only required from SEC because they are the responsible group for these doors. Also, the work request indicates that the equipment is available in Mode 5 and Mode 6, but this information is used only as a scheduling aid. If OPS personnel were contacted for clearance to begin work, they would have had to thoroughly review the work request for effects on unit operability before allowing the work to be scheduled while the unit was operating.

Unit 1 and Unit 2 Nuclear Station Modifications, MG-12142 and MG-22142, respectively, have been initiated to relocate the CAD readers that are located at the entrances to Lower Containment to another location within the Electrical Penetrations Room. There are no plans to relocate the CAD readers that are located at the entrances to Upper Containment.

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

A review of the McGuire Licensee Event Reports revealed no previous events where TS 3.0.3 was entered and Cause of Management Deficiency because of deficient communication and planning/scheduling deficiencies, was assigned as the root cause or contributing cause. Therefore, this event is not considered to be recurring.

CORRECTIVE ACTIONS:

Immediate: SEC personnel were provided with tools to cut the CAD reader cables upon request from OPS personnel, and SEC personnel continuously monitored the CADs.

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TEXT (If more space is required, use additional NRC Form 288A's) (17)

Subsequent: None

- Planned:
- 1) This report will be reviewed with ISC and Planning personnel to stress the importance of adequate communication among station work groups and re-emphasize the need to carefully evaluate work requests for the accuracy of planning/scheduling data.
 - 2) Planning personnel will revise the work request for installation of the temporary CAD readers by requiring clearance to begin work to be obtained from OPS personnel. Also, a special note will be added to the work request concerning VE operability.

SAFETY ANALYSIS:

Unit 2 entered the action statement of TS 3.0.3 for approximately 17.5 hours. During this period of time, Unit 2 was in Mode 3, Hot Standby cooling down to Mode 4, Hot Shutdown. With both VE system CADs open, the VE system would not have been able to maintain the design negative pressure in the Annulus that is required following a LOCA, but the system would have been able to draw a slight negative pressure on the annulus area if needed. The VE system would continuously operate in the exhaust mode because of the inleakage of air from the doors being open. The dampers, that direct air flow to recirculate in the Annulus or to the unit vent, modulate to control pressure in the Annulus area to minus 0.5 inches of water column. If this negative pressure cannot be maintained, the damper to recirculate air in the Annulus fails closed, and the damper to the unit vent fails open. Therefore, the VE system would still have been able to direct most potential containment leakage to the VE system. All air withdrawn from the Annulus is filtered whether in the exhaust or recirculation mode. The unit vent is monitored with radiation monitors that would have detected any contamination that was not removed by the high efficiency filters.

During the 17.5 hour time period, no incident occurred which would have challenged the VE system.

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

This event is considered to be of no significance with respect to the health and safety of the public.

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April 24, 1989

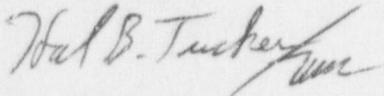
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: McGuire Nuclear Station, Unit 2
Docket No. 50-370
Licensee Event Report 370/88-02-01, Revision

Gentlemen:

Pursuant to 10CFR 50.73 Sections (a)(1) and (d), attached is revised Licensee Event Report 370/88-02-01 concerning Unit 2 entering Technical Specification 3.0.3 due to both trains of the Annulus Ventilation system being inoperable. This revised report is being submitted in accordance with 10 CFR 50.73 (a)(2)(i)(B), and to indicate changes in planned corrective actions committed to in the original report. This event is considered to be of no significance with respect to the health and safety of the public.

Very truly yours,



Hal B. Tucker

SEL/289/sel

Attachment

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