

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Nine Mile Point Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 4 1 1 0	PAGE (3) 1 OF 0 4
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TITLE (4)
CO2 Fire Suppression System Technical Specification Violation

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(S)
01	27	87	87	008	01	07	07	87	N/A		0 5 0 0 0
									N/A		0 5 0 0 0

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 01010	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.406(e)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.406(a)(1)(i)	<input type="checkbox"/> 50.36(a)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(e)						
	<input type="checkbox"/> 20.406(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)						
	<input type="checkbox"/> 20.406(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)							
	<input type="checkbox"/> 20.406(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(vii)(B)							
	<input type="checkbox"/> 20.406(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)							

LICENSEE CONTACT FOR THIS LER (12)

NAME Robert G. Randall, Supervisor Technical Support	TELEPHONE NUMBER 311 5 314 9 1-12 4 14 15
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15) MONTH: DAY: YEAR:
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

During a routine mark-up (tag out) of a carbon dioxide (CO₂) fire suppression system at Nine Mile Point Unit 2 on January 27, 1987, a Limiting Condition for Operation as defined by Technical Specification 3.7.7.3.a was violated. The violation occurred when a CO₂ system was tagged out of service and the required compensatory measures (i.e., a continuous fire watch) were not established within one hour. At the time of the event, the plant was in the cold shutdown condition with the mode switch in the "SHUTDOWN" position.

The event was caused by a misinterpretation of communication between the Chief Shift Operator (CSO) and Station Shift Supervisor (SSS) on duty. The CSO interpreted a request by the SSS to complete a mark-up sheet for the CO₂ system as a verbal approval to actually tag the system out of service. The SSS is responsible for reviewing all mark-up sheets for applicable Technical Specifications and notifying the proper department to whom they apply. The SSS did not review the completed mark-up sheet before the CSO hung the mark-up tags and thus did not notify the Fire Department to establish a fire watch. The duration of the event was approximately 72 minutes.

To prevent similar events from occurring in the future, all Operations personnel shall be notified in writing that verbal approval to perform actions where actual review and signature is required is not acceptable.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

I. DESCRIPTION OF EVENT

During a routine mark-up (tag out) of a carbon dioxide (CO₂) fire suppression system at Nine Mile Point Unit 2 a Limiting Condition for Operation (LCO) as defined by Technical Specifications was violated. The violation occurred when the CO₂ system for the Division I Switchgear Room was tagged out of service by a mark-up without required compensatory measures being established within one hour as required by Technical Specification 3.7.7.3.a. At the time of the violation Nine Mile Point Unit 2 was in the cold shutdown condition with the mode switch in the "SHUTDOWN" position. There were no other components or systems which were inoperable and/or out of service that contributed to this event. No plant systems or other component failures resulted from the event and no operator action was required. The initial fuel load had not been irradiated at NMP2.

The CO₂ system involved is located in a fire zone (333XL) that provides protection for the Division I Switchgear Room on Elevation 261' of the Control Building. The mark-up was obtained by the Niagara Mohawk Mechanical Maintenance Department to perform work in this area which required climbing a ladder. Per Niagara Mohawk Administrative Procedure 3.3.1, "Whenever work is to be performed in an area protected by an automatic or remote operated CO₂ or Halon fire protection system and that work requires the workman or inspector to be in a position (such as top of a ladder) which might preclude rapid escape from the area, a red mark-up shall be placed on the system and a fire watch or patrol as directed by Technical Specifications or the Site Fire Protection Program shall be placed to include areas covered by the marked-up system."

The mark-up was requested by the Maintenance Department on the morning of January 27, 1987. The Station Shift Supervisor (SSS) asked the Chief Shift Operator (CSO) to prepare a mark-up sheet for the CO₂ system. The CSO responded by completing a mark-up sheet and sending an operator to place the tags immediately thereafter. The CO₂ was removed from service at 10:18 hours when mark-up tags were placed by order of the CSO. At 11:18 hours, one hour after the mark-up tags were hung, the LCO violation occurred.

The violation was discovered at about 12:30 when a Fire Chief, who happened to be present in the control room when the mark-up was being processed became concerned that he had not been notified by the SSS to establish a fire watch in the Division I Switchgear Room. The Fire Chief called the control room to inquire about the status of the mark-up and was informed that the CO₂ system had been tagged out of service at 10:18 hours. Upon receiving this information the Fire Chief recognized that a Technical Specification violation had occurred and immediately established a continuous fire watch in the area which ended the event. The event started at approximately 11:18 hours, at the end of the one-hour period to establish a fire watch per Technical Specifications, and ended at approximately 12:30 hours, when the fire watch was established, for a total duration of approximately 72 minutes.



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TEXT (If more space is required, use additional NRC Form 366A's) (17)

II. CAUSE OF EVENT

A root cause analysis for the event has been completed per Supervisory Procedure S-SUP-1 "Root Cause Analysis Program". The root cause has been determined to have been a communication deficiency between the SSS and the CSO. The problem occurred when the SSS told the CSO to prepare a mark-up sheet for the Maintenance Department personnel requesting it. The CSO interpreted the request as a verbal approval from the SSS to perform the actual hanging of the mark-up tags. Subsequently the CSO completed the mark-up sheet and had the mark-up tags hung in the field without reconsulting the SSS. The SSS is responsible for the review of mark-up sheets for applicable Technical Specifications and notification of the proper department (Fire Department in this case) but neither function was completed as the SSS was not aware of the fact that the CSO had ordered the mark-up tags hung.

III. ANALYSIS OF EVENT

Although this event resulted in an LCO violation, no adverse safety consequences resulted from it. Even though the CO₂ system was unavailable for service in the Division I Switchgear Room there was still fire detection and manual suppression capability available in the area. If this area and all equipment in it were lost to a fire, it would not affect the operators ability to safely shutdown the plant under any operating condition or power level. This is due to the existence of redundant systems (including switchgear) and the separation of redundant systems by fire barriers to support the Nine Mile Point Unit 2 Safe Shutdown Analysis.

IV. CORRECTIVE ACTIONS

Immediate corrective action was to establish a continuous fire watch patrol in the Division I Switchgear Room thus satisfying the LCO and ending the event. The continuous fire watch was established at approximately 12:30 hours on January 27, 1987 and maintained until the mark-up on the CO₂ system was cleared and the system was once again in the operational condition.

To prevent similar events from occurring in the future all operations personnel shall be notified in writing that when confronted with an item or action which requires the review and approval of another cognizant group, a verbal approval is not an acceptable alternative. That item or action shall not be performed until the required individual or group has personally reviewed the item and indicated their approval with a signature and/or initials in the appropriate manner. A copy of this notification shall also be included in the "Lessons Learned" file in the control room for future reference to operations personnel.



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

V. ADDITIONAL INFORMATION

No previous similar events of this type have occurred at Nine Mile Point Unit 2.

Identification of Components Referred to in this LER

Component	IEEE 803 EIIS Funct	IEEE 805 System ID
CO ₂ System	--	KQ
Fire Detector	28	IC

