Nebraska Public Power District

COOPER NUCLEAR STATION
P.O. BOX 98, BROWNVILLE, NEBRASKA 68321
TELEPHONE (402) 825-3811

NLS940135

December 13, 1994

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

Dear Sir:

Cooper Nuclear Station Licensee Event Report 94-036, Supplement 2 is forwarded as an attachment to this letter.

Sincerely,

J. T. Herron
Plant Manager

/nr

Attachment

cc: L. J. Callan
G. R. Horn
J. H. Mueller
R. G. Jones
R. A. Sessoms
K. C. Walden
INPO Records Center
NRC Resident Inspector
R. J. Singer
CNS Training
CNS Quality Assurance

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NRC FORM 366 (5-92) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104
EXPIRES 5/31/95

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (MNBB 7714), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
COOPER NUCLEAR STATION	05000298	1 OF 3

TITLE (4) Fire Suppression Water System Did Not Meet the Minimum Requirements For Operability

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 NAME	DOCKET NUMBER
12	07	94	94	-- 036 --	02	12	13	94	FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	N
POWER LEVEL (10)	0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	X OTHER
20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	(Specify in Abstract below and in Text, NRC Form 366A)
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
William R. Victor, Licensing Engineer	(402) 825-3811

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X	YES (If yes, complete EXPECTED SUBMISSION DATE).	NO		12	19	94

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On December 7, 1994, an electrical transient on the 12.5 KV System resulted in loss of power to the Cooper Nuclear Station (CNS) primary electric-driven fire pump and fire water jockey pump. The diesel-driven fire pump control switch was placed in pull-to-lock to prevent pump damage from erroneous pump starts due to system header pressure decay. These conditions resulted in Fire Suppression Water (FSW) System inoperability. Power was restored and the FSW System was returned to operability later that day.

Additionally, on December 11 and 12, 1994, planned power outages occurred to restore the 12.5 KV System to its primary power source, which had been shifted following the December 7 event. This resulted in again placing the FSW System in the same inoperable configuration. Power was restored within 4 hours and 2 hours respectively, and the FSW System was thereupon returned to operability.

Per CNS Technical Specifications, whenever the FSW System is inoperable a written report is required within one working day following the event. This LER supplement fulfills the content requirement for each event and the timeliness requirement of the 12/12/94 event (the initial submittal and Supplement 1 to this LER fulfilled the timeliness requirements of the 12/7/94 and 12/11/94 events).

SPECIAL REPORT REQUIREMENT

CNS Technical Specification 3.15.C.2 requires the submittal of a Special Report within one working day whenever the Fire Suppression Water System is inoperable. The report is to discuss the actions taken, cause of the inoperability, and plans and schedule for restoring the system to operable status. This LER supplement fulfills this reporting requirement.

CAUSE OF THE INOPERABILITY

Flow for the CNS FSW System is provided by one electric-driven pump and one diesel-driven pump. An additional electric pump is available as an installed backup. The Fire Water Pumps auto-start on low fire water header pressure. An electric jockey pump maintains the header pressurized to prevent inadvertent pump starts.

On December 7, 1994, at 1629 the 12.5 KV System was deenergized due to a failed lightning arrestor that disconnected the system from its normal power source. The 12.5 KV System powered the primary electric fire pump and the jockey pump, resulting in their inoperability. To prevent diesel pump damage due to an erroneous pump start resulting from system pressure decay, the pump control switch was placed in the pull-to-lock position in accordance with approved Station procedures. This configuration left the diesel pump available, but rendered it inoperable due to the defeat of its auto-start capability. The backup electric pump (which was unaffected by the transient and remained operable) provided the alternate FSW System capability as required by Technical Specification 3.15.C.1.

Additionally, on December 11, 1994, at 1508 the 12.5 KV System was intentionally deenergized to facilitate realignment to its normal power source (the alternate source had been used following the December 7 event). In anticipation of this outage, the FSW System was placed in an identical configuration as before with the diesel pump placed in pull-to-lock.

Finally, on December 12, 1994, at 2132 the 12.5 KV System was again deenergized to permit realignment to the normal power source (the 12/11/94 attempt was unsuccessful due to a circuit breaker failure). Again, in anticipation of this outage, the diesel pump was placed in pull-to-lock, which rendered the FSW System inoperable when electrical power was subsequently removed from the electric fire pump.

ACTIONS TAKEN

1. 12/7/94 Event- In the December 7 event, roving 4-hour fire patrols were dispatched to those site areas affected by the power outages. The 12.5 KV System was returned to service later that day (via the alternate power source), and at 2018 on 12/7/94, the FSW System was returned to operability. The NRC was informed of the event by telephone within 24 hours of occurrence, as specified in the CNS Technical Specifications.

2. 12/11/94 Event- In the December 11 event, power was restored and the FSW System returned to operability at 1827 on 12/11/94. Owing to a 13.8/12.5 KV transformer secondary side circuit breaker fault (the normal power source for the 12.5 KV System) experienced during the restoration, the 12.5 KV System was maintained aligned to the alternate power source pending further investigation. Due to miscommunications during the Shift Supervisor turnover, NRC telephone notification of this event was made within 28 hours of the event rather than the specified 24 hours.

3. 12/12/94 Event- In the December 12 event, power was restored and the FSW System returned to operability at 2243 on 12/12/94. As a compensatory measure during the power outage, 4-hour fire patrols were stationed for the affected buildings. NRC telephone notification of this event was made within the required 24 hours. It was subsequently noted that the verbal notification mistakenly reported the planned power loss at 2100 rather than 2132, and the restoration at 2132 rather than 2237. This report amends the earlier notification times.

PLANS AND SCHEDULE FOR RESTORING SYSTEM TO OPERABILITY

As discussed in the previous paragraph, the FSW System was returned to operability in each case following the restoration of 12.5 KV power.

In each of the three events described previously, the safety significance is considered to be low owing to the relatively short period of system inoperability, the availability of the diesel-driven fire pump for manual actuation, and the operability of the backup electric fire pump.