



Commonwealth Edison
 LaSalle County Nuclear Station
 Rural Route #1, Box 220
 Marseilles, Illinois 61341
 Telephone 815/357-6761

DCD

January 21, 1991

Director of Nuclear Reactor Regulation
 U.S. Nuclear Regulatory Commission
 Mail Station P1-137
 Washington, D.C. 20555

Dear Sir:

Licensee Event Report 890-014-00, Docket #050-374 is being submitted to your office in accordance with 10CFR50.73(a)(2)(x).

Wro
 G. J. Diederich
 for Station Manager
 LaSalle County Station

GJD/JDB/mkl

En.losure

xc: Nuclear Licensing Administrator
 NRC Resident Inspector
 NRC Region III Administrator
 INPO - Records Center

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- LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1)

Docket Number (2)

Page (3)

LaSalle County Station Unit 2

0 | 5 | 0 | 0 | 0 | 3 | 7 | 4 | 1 | of | 0 | 3

Title (4)

Insulation Fire On The 2A Turbine Driven Reactor Feedwater Pump Due To Oil Leak On Insulation

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)
11	22	90	90	0114	00	01	21	91		0 5 0 0 0 1 1

OPERATING MODE (9)	1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR (Check one or more of the following) (11)									
	POWER LEVEL (10)	0	8	0	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)	Other (Specify in Abstract below and in Text)	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)		
				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
James Behn, Technical Staff Engineer, Extension 2445	AREA CODE: 8 1 5 3 5 7 - 6 7 6 1

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

CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS
X	F	W		Y					

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15)	Month	Day	Year
Yes (If yes, complete EXPECTED SUBMISSION DATE) X NO			

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

At approximately 0745 hours on December 22, 1990 with Unit 2 in Operational Condition 1 (Run) at 80% power, Security personnel notified the Control Room that a fire watch on Elevation 815 of the Auxiliary Building noticed a smell of something burning on that elevation. The Center Desk dispatched an Operator to investigate. At the same time a Shift Foreman was in the Auxiliary Building and noticed the smell. The Shift Foreman proceeded to the Turbine Driven Reactor Feedwater Pump (TDRFP) rooms to investigate. Upon arriving at the 2A TDRFP, he noticed smoke coming from the front area of the TDRFP. He then notified the Control Room. A fire watch was established and additional fire suppression equipment was brought to the area. Reactor power was reduced to 900 mwe at 0845 hours in preparation for taking the 2A TDRFP off-line. At 0915 hours the motor driven reactor feedwater pump (MDRFP) was on-line and the 2A TDRFP was shutdown. At 0925 hours there was a report of flames in the 2A TDRFP room. The Fire Brigade responded at 0927 hours. At this time, the Control Room Operators closed the high pressure and low pressure oil supplies to the turbine in order to prevent the fire from spreading. At 0945 hours the fire was extinguished.

The Fire Brigade was not able to extinguish the fire within ten minutes of arriving on the scene and a Generating Station Emergency Plan (GSEP) unusual event was declared at 0940 hours. During this event hydraulic control oil was isolated to the 2A TDRFP. At 1025 hours the GSEP event was terminated. Work Request L04372 was generated to repair the oil leak.

This event is being reported pursuant to 10CFR50.73(a)(2)(x) due to a fire of greater than ten minutes which could have hampered site personnel in the performance of their duties.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	Sequential Number	Revision Number						
LaSalle County Station Unit 2	0 5 0 0 0 3 7 4	9 0	- 0 1 4	- 0 0				0 2	OF	0 3

TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].

A. CONDITION PRIOR TO EVENT

Unit(s): 2 Event Date: 12/22/90 Event Time: 0925 Hours

Reactor Mode(s): 1 Mode(s) Name: Run Power Level(s): 80%

B. DESCRIPTION OF EVENT

At approximately 0745 hours on December 22, 1990 with Unit 2 in Operational Condition 1 (Run) at 80% power, Security personnel notified the Control Room that a fire watch on Elevation 815 of the Auxiliary Building noticed a smell of something burning on that elevation. The Center Desk dispatched an Operator to investigate. At the same time a Shift Foreman was in the Auxiliary Building and noticed the smell. The Shift Foreman proceeded to the Turbine Driven Reactor Feedwater Pump (TDRFP) rooms to investigate. Upon arriving at the 2A TDRFP, he noticed smoke coming from the front area of the TDRFP. He then notified the Control Room. A fire watch was established and additional fire suppression equipment was brought to the area. Reactor power was reduced to 900 mwe at 0845 hours in preparation for taking the 2A TDRFP off-line. At 0915 hours the motor driven reactor feedwater pump (MDRFP) was on-line and the 2A TDRFP was shutdown. At 0925 hours there was a report of flames in the 2A TDRFP room. The Fire Brigade responded at 0927 hours. At this time, the Control Room Operators closed the high pressure and low pressure oil supplies to the turbine in order to prevent the fire from spreading. At 0945 hours the fire was extinguished.

The Fire Brigade was not able to extinguish the fire within ten minutes of arriving on the scene and a Generating Station Emergency Plan (GSEP) unusual event was declared at 0940 hours. During this event hydraulic control oil was isolated to the 2A TDRFP. At 1025 hours the GSEP event was terminated. Work Request L04372 was generated to repair the oil leak.

This event is being reported pursuant to 10CFR50.73(a)(2)(x) due to a fire of greater than ten minutes which could have hampered site personnel in the performance of their duties.

C. APPARENT CAUSE OF EVENT

Hydraulic oil was leaking around the vibration probe flange onto the insulation in the vicinity of the probe and saturated it.

The oil used is Steam Turbine Oil manufactured by Mobil under the name of DTE 797. This oil has a flash point temperature of 410 degrees Fahrenheit per ASTM D-92. The feedwater temperature going through the pump is 416 degrees Fahrenheit. Insulation is used around the pump to prevent heat loss.

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		Year	Sequential Number	Revision Number			
LaSalle County Station Unit 2	0 5 0 0 0 3 7 4	9 0	- 0 1 4	- 0 0	0 3	0 6	0 3

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D. SAFETY ANALYSIS OF EVENT

The 2A turbine driven reactor feed pump room is identified as Fire Zone 5A2. This zone does not contain any safety-related equipment. All walls and slabs at both elevations are a minimum of 36 inches thick structural reinforced concrete. The North, South and East walls are three hour fire rated walls. Automatic Sprinklers are provided for the room with alarm and annunciation in the Control Room. The sprinkler system is designed to produce a density of 0.3 gpm/ft² over 3000 ft² area. Manual backup protection consists of two firehose stations each with 100 feet of 1 1/2 inch U.L. listed hose and portable fire extinguishers.

The average fire loading for this zone, including a transient fire loading, equivalent to 55 gallons of lube oil, is 24,800 BTU/ft². This is equivalent to a fire severity of less than 1/2 hour.

A fire in this zone will have no impact on safe shutdown of the unit since the zone does not contain any safety related equipment. A GSEP unusual event was declared at 0940 hours due to the fire lasting greater than ten minutes in the protected area after the Fire Brigade had arrived. The GSEP was terminated at 1025 hours by the Shift Engineer after the oil soaked insulation was removed and conditions had stabilized.

E. CORRECTIVE ACTIONS

The initial corrective action was notification of the Control Room with response by the Fire Brigade. The 2A turbine driven reactor feed pump was taken off line in order to repair the oil leak on the outboard turbine bearing vibration probe.

The vibration probe flange was machined and a portion of the shaft was ground. This allowed proper clearances between the bearing cover and flange as required to obtain proper mating surfaces, preventing oil leaks. The probe was reinstalled and the reconnected electrical connection made. No new oil leaks developed upon testing the pump.

F. PREVIOUS EVENTS

None

G. COMPONENT FAILURE DATA

There were no component failures in this event.