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 FACIL: 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251
 AUTH. NAME AUTHOR AFFILIATION
 POWELL, D.R. Florida Power & Light Co.
 PLUNKETT, T.F. Florida Power & Light Co.
 RECIP. NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-003-00: on 910626, bus lockout resulted in
 de-energizing of 4C intake cooling water pump & 4C CCW pump.
 Caused by inadequate administrative controls. Work in area of
 relay that actuated was stopped. W/910701 ltr.

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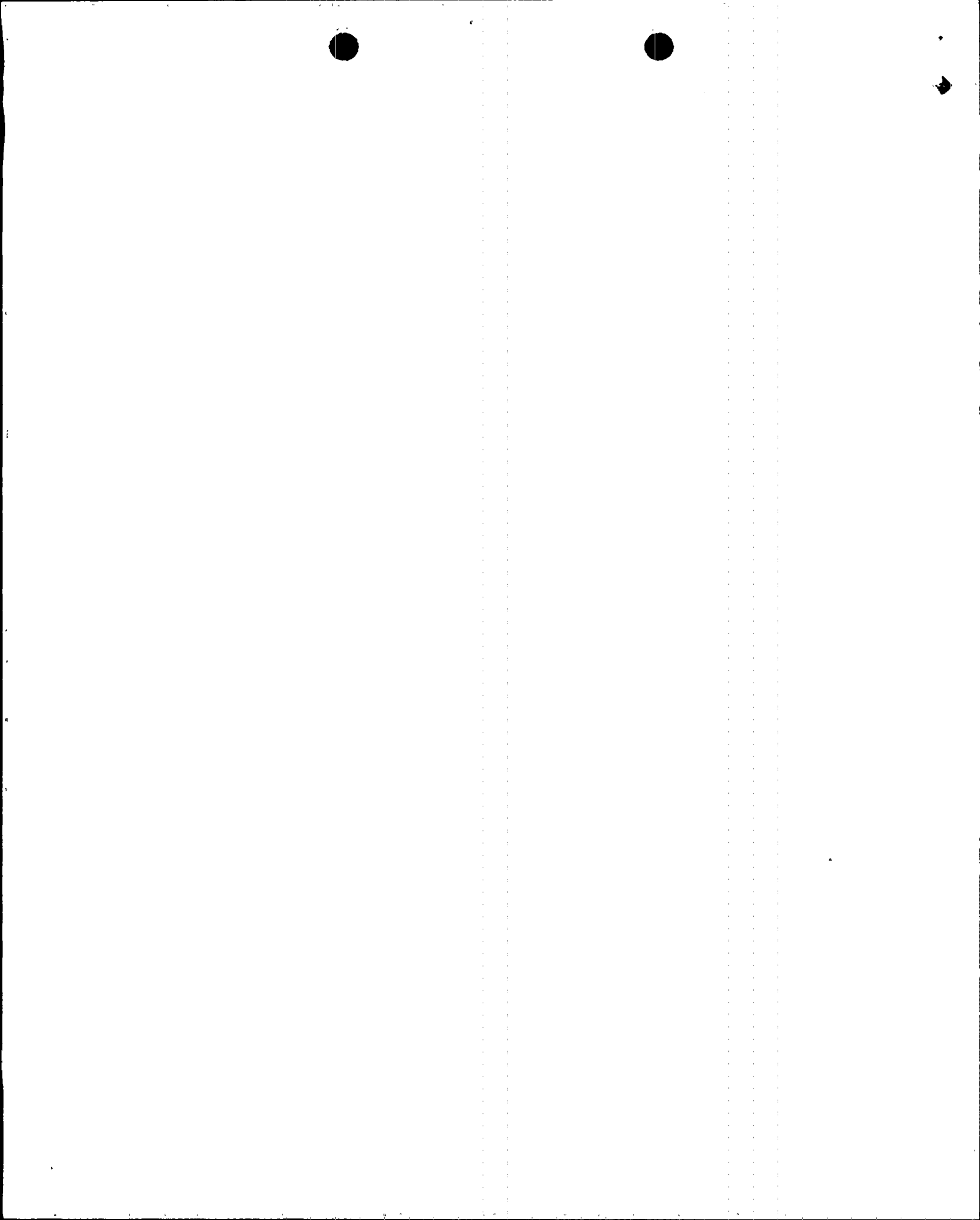
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P.O. Box 029100, Miami, FL, 33102-9100

JUL 01 1991

L-91-189
10 CFR 50.73

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

Gentlemen:

Re: Turkey Point Unit 4
Docket No. 50-251
Reportable Event: 91-003-00
Date of Event: June 26, 1991
De-energization of Intake Cooling Water System Pump
Causes the Interruption of Spent Fuel Pool Cooling Due to
Personnel Error

The attached voluntary Licensee Event Report 251-91-003-00 is being provided for information purposes only following the guidance provided by NUREG 1022, Supplement 1, Item 19.1.

Very truly yours,

T.F. Plunkett by G.W. Pearce

T. F. Plunkett
Vice President
Turkey Point Nuclear

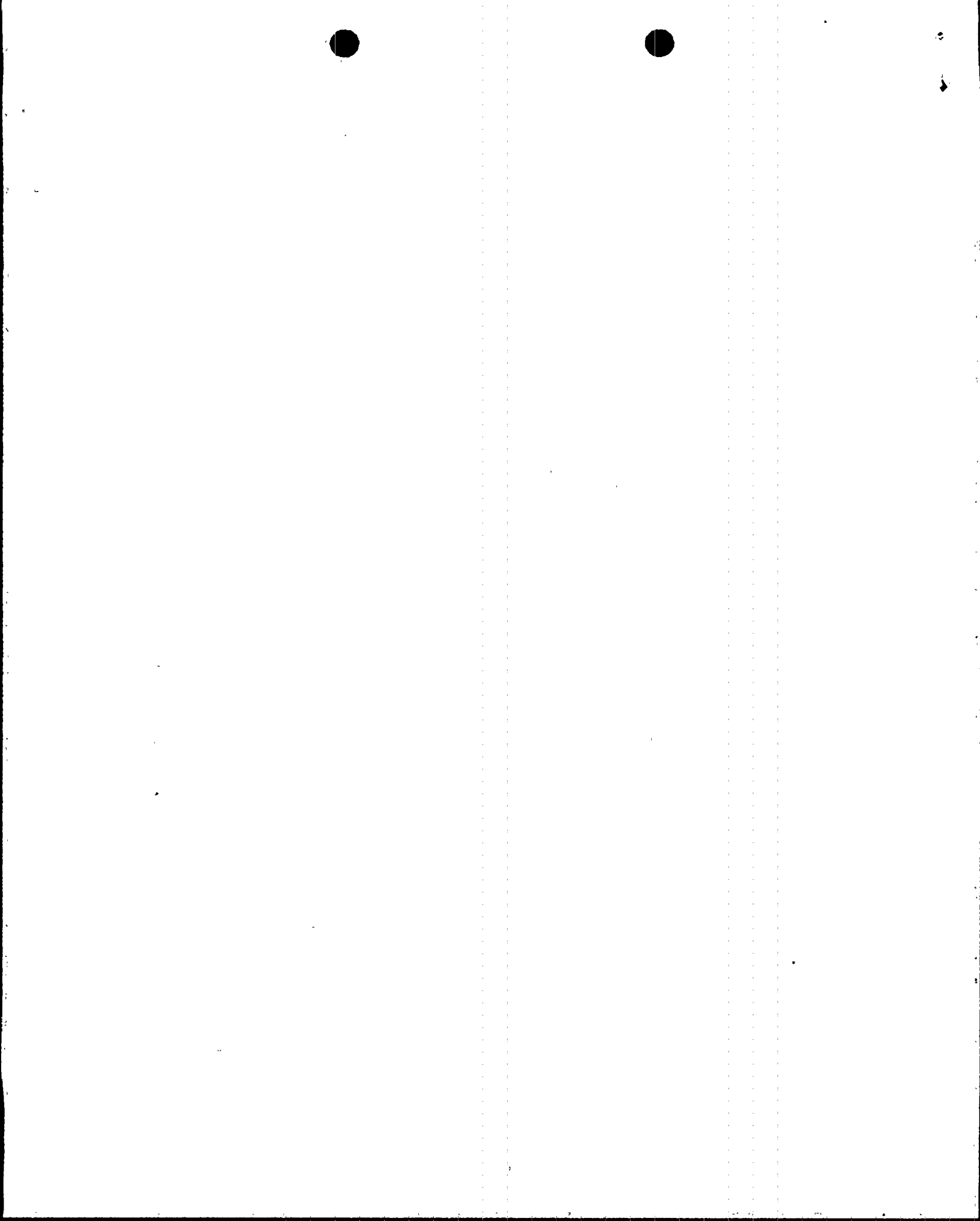
TFP/DPS/ds

enclosures

cc: Stewart D. Ebnetter, Regional Administrator, Region II,
USNRC,
Senior Resident Inspector, USNRC, Turkey Point Plant

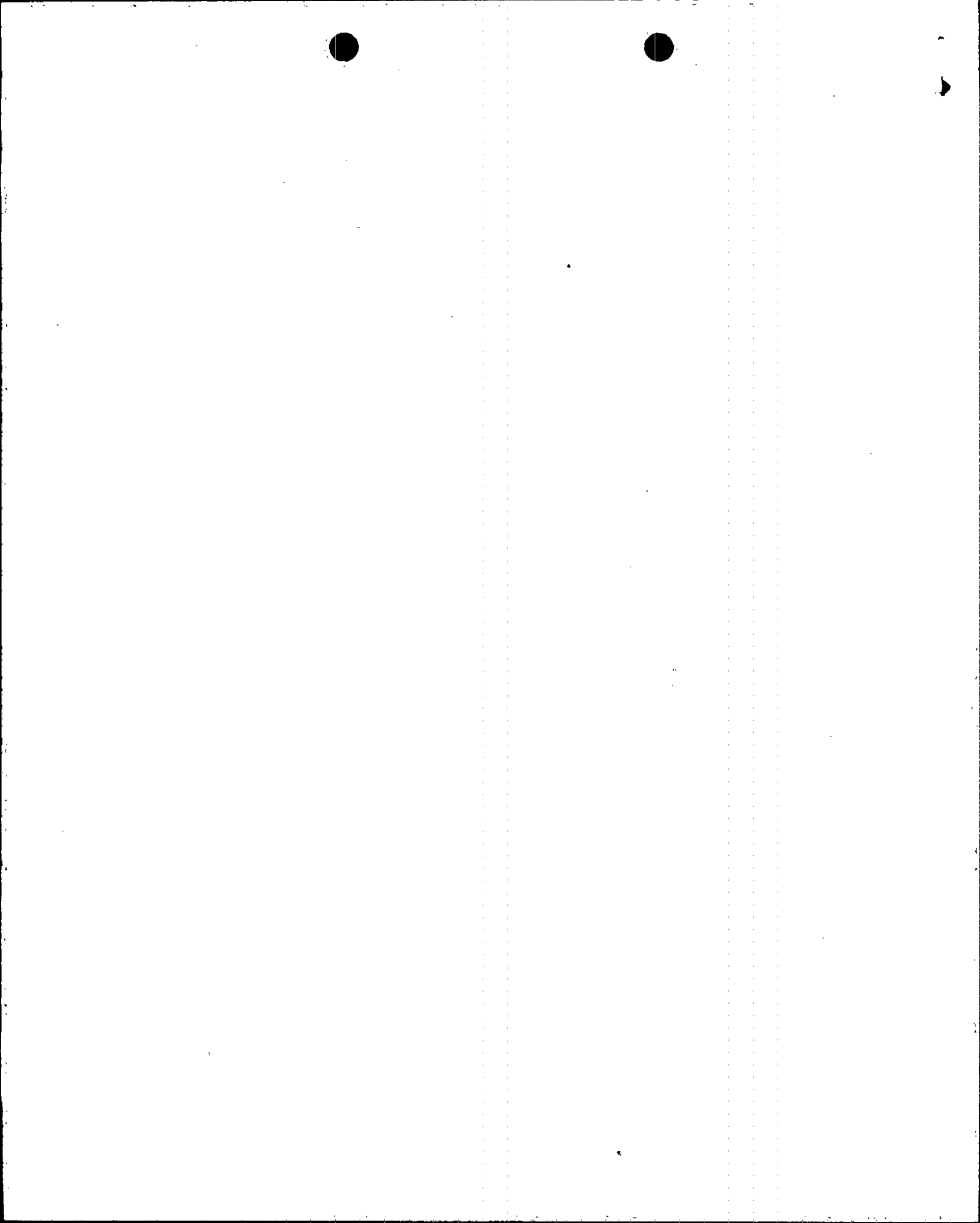
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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) TURKEY POINT UNIT 4										DOCKET NUMBER (2) 05000251			PAGE (3) 1 OF 4		
TITLE (4) DE-ENERGIZATION OF INTAKE COOLING WATER SYSTEM PUMP CAUSES THE INTERRUPTION OF SPENT FUEL POOL COOLING DUE TO PERSONNEL ERROR															
EVENT DATE (5)				LER NUMBER (6)			RPT DATE (7)			OTHER FACILITIES INV. (8)					
MON	DAY	YR		YR	SEQ #	R#	MON	DAY	YR		NAME				DOCKET # (5)
06	26	91		91	003	00	06	28	91						
OPERATING MODE (9)			N			<u>10 CFR</u> <u>OTHER Voluntary</u> (Specify in Abstract below and in text)									
POWER LEVEL (10)			000												
LICENSEE CONTACT FOR THIS LER (12)															
David R. Powell, Superintendent of Licensing											TELEPHONE NUMBER				
											305-246-6559				
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)															
CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	NFRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	NFRDS					
SUPPLEMENTAL REPORT EXPECTED (14)											EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR
YES	(if yes, complete EXPECTED SUBMISSION DATE)					NO		X							
ABSTRACT (16)															
<p>This voluntary LER is being submitted following the guidance provided by NUREG 1022, Supplement 1, Item 19.1.</p> <p>On June 26, 1991, at 0308 EDT, with both units defueled, the Unit 4, 4D 4kV bus locked out. The bus lockout resulted in the de-energizing of the 4C Intake Cooling Water pump and the 4C Component Cooling Water (CCW) Pump. CCW pump 4A was in service and remained in service during this event. With 4A and 4B ICW pumps out of service for maintenance, the de-energizing of the 4C ICW pump made the Spent Fuel Pool (SFP) cooling system inoperable since the normal heat sink was not available.</p> <p>On June 26, 1991, at 0403 EDT, the 4C CCW pump was started and at 0412 EDT, 4C ICW pump was started restoring the normal heat sink for the Unit 4 SFP cooling system.</p> <p>The root cause of this event was inadequate administrative controls. A sensitive equipment list used in preparing a work package was superseded which resulted in a bumped relay 174, device RB inside cubicle 4AD06. Relay 174, device RB tripped causing the lockout of the 4D 4kV bus.</p> <p>All work in the area of the relay that actuated (relay 174, device RB) was stopped so the cause of the actuation could be evaluated. Work will not resume until the event has been reviewed with applicable contractor personnel emphasizing the sensitivity of the equipment in the areas being worked and also emphasizing attention to detail.</p>															



LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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TURKEY POINT UNIT 4	05000251	91-003-00	02 OF 04

I. EVENT DESCRIPTION

This voluntary LER is being submitted following the guidance provided by NUREG 1022, Supplement 1, Item 19.1.

On June 26, 1991, at 0308 EDT, with both units defueled, the Unit 4, 4D 4kV bus locked out. The bus lockout resulted in the de-energizing of the 4C Intake Cooling Water pump and the 4C Component Cooling Water (CCW) Pump. CCW pump 4A was in service and remained in service during this event. With 4A and 4B ICW pumps out of service for maintenance, the de-energizing of the 4C ICW pump made the Spent Fuel Pool (SFP) cooling system inoperable since the normal heat sink was not available.

On June 26, 1991, at 0403 EDT, the 4C CCW pump was started and at 0412 EDT, 4C ICW pump was started restoring the heat sink for the Unit 4 SFP cooling system.

II. EVENT CAUSE

1. Immediate Cause

The interruption of normal SFP cooling to the Unit 4 Spent Fuel Pool was caused by the de-energization of the 4C ICW Pump. CCW and ICW provide the heat sink for the Spent Fuel Pool Cooling System.

2. Immediate Cause

The 4C CCW and 4C ICW pumps were de-energized because of the lockout of the Unit 4, 4D 4kV bus.

3. Root Cause

A root cause of this event was inadequate administrative controls. The sensitive equipment list had been updated on June 12, 1991, to include cubicle 4AD06. The work control package for the cable pull did not use the latest revision of the sensitive equipment list, therefore the work control package had no warning of sensitive equipment in cubicle 4AD06... Thus, the construction personnel working in the area did not know cubicle 4AD06 contained sensitive equipment that could affect systems required to be in operation. As a result, contract electricians were in the process of making a cable pull when the cable bumped relay 174, device RB inside cubicle 4AD06. Relay 174, device RB tripped causing the lockout of the 4D 4kV bus.



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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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5. Contributing Cause

An additional contributing cause was a non-cognitive licensed personnel error. The cable pull was not identified as having a potential effect on relay 174.

III. EVENT SAFETY ANALYSIS

Following a loss of cooling to the spent fuel pool, an extended period of time is available to restore cooling prior to the pool temperature increasing to the established administrative limit of 180 degrees Fahrenheit (F). For this event, SFP cooling was reestablished in approximately one hour.

Administrative controls require the immediate recording of the SFP temperature and the recording of the SFP temperature every half hour until SFP cooling is restored. These records show the temperature of the SFP to have been 100 degrees F immediately after the loss of SFP cooling and immediately after SFP cooling was restored. Thus, there was no measurable increase in SFP temperature during this event. In addition, there was no decrease in SFP water level noted during the event.

Thus, the health and safety of the public were not affected by this event.

IV. CORRECTIVE ACTIONS

1. All work in the area of the relay that actuated (relay 174, device RB) was stopped so the cause of the actuation could be evaluated. Work will not resume until the event has been reviewed with applicable contractor personnel emphasizing the sensitivity of the equipment in the areas being worked and also emphasizing attention to detail.
2. SFP cooling was restored at 0403 EDT, June 26, 1991.
3. This event is being reviewed by the Construction and Technical departments to determine if additional corrective actions are necessary. This review will also emphasize the necessity to use the current revision of applicable procedures for work package preparation.
4. This event is also being reviewed by Licensed personnel to emphasize the importance of a thorough review of proposed work to identify potentially affected equipment.



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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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V. ADDITIONAL INFORMATION

1. Similar LERs

Voluntary LER 251-90-003-01 issued September 14, 1990, also reported a loss of cooling to the spent fuel pool. However, the cause of the event reported in the 1990 LER was a broken cooling pump shaft.

LER 251-91-001-01 issued April 15, 1991, reported a loss of normal spent fuel pool cooling due to the lockout of the Unit 4 Startup transformer.

