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J. E. Pollock
Site Vice President

March 27, 2008
Indian Point Unit No. 3
Docket No. 50-286
NL-08-044

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, D.C. 20555-0001

Subject: Licensee Event Report # 2008-001-00, "Technical Specification Prohibited Condition Due to Exceeding the Allowed Completion Time for an Inoperable Safety Injection Pump Caused by a Failed Motor Supply Breaker"

Dear Sir or Madam:

Pursuant to 10 CFR 50.73(a)(1), Entergy Nuclear Operations Inc. (ENO) hereby provides Licensee Event Report (LER) 2008-001-00. The attached LER identifies an event where there was a Technical Specification prohibited condition that exceeded the Allowed Completion Time for a train of the Emergency Core Cooling System, which is reportable under 10 CFR 50.73(a)(2)(i)(B). This condition was recorded in the Entergy Corrective Action Program as Condition Report CR-IP3-2008-00252.

There are no new commitments identified in this letter. Should you have any questions regarding this submittal, please contact Mr. Robert Walpole, Manager, Licensing at (914) 734-6710.

Sincerely,

J. E. Pollock
Site Vice President
Indian Point Energy Center

cc: Mr. Samuel J Collins, Regional Administrator, NRC Region I
NRC Resident Inspector's Office, Indian Point 3
Mr. Paul Eddy, New York State Public Service Commission
INPO Record Center

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LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME: INDIAN POINT 3	2. DOCKET NUMBER 05000-286	3. PAGE 1 OF 4
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4. TITLE: Technical Specification Prohibited Condition Due to Exceeding the Allowed Completion Time for an Inoperable Safety Injection Pump Caused by a Failed Motor Supply Breaker

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
1	27	2008	2008	001 - 00		3	27	2008		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
10. POWER LEVEL 100%	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

NAME Lou Lubrano, Component Engineer	TELEPHONE NUMBER (Include Area Code) (914) 734-6681
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
X	ED	BKR	W120	Y					

14. SUPPLEMENTAL REPORT EXPECTED

YES (If yes, complete 15. EXPECTED SUBMISSION DATE) NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On January 27, 2008, during an attempt to start the 31 Safety Injection Pump (SIP), the 31 SIP failed to start. Investigation into the cause of the failure determined that the 31 SIP 480 volt AC supply breaker had failed to close. Technical Specification (TS) 3.5.2, Emergency Core Cooling Systems (ECCS), Condition A was entered for one or more trains inoperable. A review of past operation of the 31 SIP determined it was last operated successfully on January 11, 2008. TS 3.5.2, Emergency Core Cooling Systems (ECCS), requires three trains of ECCS to be operable. The required action A.1 for TS 3.5.2 Condition A, one or more trains inoperable, is to restore the train(s) to operable within a completion time of 72 hours. The inoperable condition during past operation exceeded the 72 hour allowed completion time for TS 3.5.2 and the required actions were not performed resulting in a reportable condition. The cause of the breaker not closing was a failure of the breaker closing springs to charge. The failure of the breaker closing springs to charge was caused by a failure of the breaker charging motor brush assembly to remain intact due to a retaining screw becoming dislodged. Corrective actions included replacement of the breaker spring charging motor, breaker testing and return to service on January 27, 2008. A contributing cause was lack of an inspection requirement to check the breaker motor brush retaining screws. The breaker maintenance procedure was revised to require inspection of the breaker motor brush retaining screws. The event had no effect on public health and safety.

LICENSEE EVENT REPORT (LER)

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Indian Point Unit 3	05000-286	2008	01	00	2 OF 4

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

Note: The Energy Industry Identification System Codes are identified within the brackets {}.

DESCRIPTION OF EVENT

On January 27, 2008, while at 100% steady state reactor power, during an attempt to start the 31 Safety Injection Pump (SIP) {BQ} {P} to fill the 34 Accumulator, the 31 SIP failed to start. Investigation into the cause of the failure determined that the 31 SIP 480 Volt AC (VAC) {ED} supply breaker {BKR} had failed to close. Visual inspection of the breaker prior to removal from its cubicle found that the closing spring charge indicator was not visible suggesting that the breaker may not have charged as required for breaker closure. During breaker removal from its cubicle, a spring discharge sound was heard, the spring charge flag was visible and indicated discharged. This finding suggests that the breaker closing spring was at least partially charged while installed. At approximately 09:02 hours, the 31 SIP was declared inoperable and Technical Specification 3.5.2, Emergency Core Cooling Systems (ECCS), Condition A was entered for one or more trains inoperable and two SIPs, one Residual Heat Removal (RHR) pump and one containment recirculation pump are operable. On January 27, 2008, after replacement of the breaker charging spring motor and successful test and start of the 31 SIP, the 31 SIP and breaker were declared operable and TS 3.5.2 was exited at 20:48 hours. The condition was recorded in the Indian Point Corrective Action Program (CAP) as CR-IP3-2008-00252.

The 31 SIP is a part of the High Head Safety Injection System which is one of three subsystems of the ECCS that is composed of three 50% capacity trains with one pump for each train. The other two subsystems are the Recirculation System (IRS) {BP} composed of two 100% capacity trains with one pump for each train, and the RHR System (RHRS) {BP} composed of two 100% trains with one pump for each train. Electric power to the pumps associated with the ECCS is provided by 480 VAC DS breakers that connect to 480 VAC safety busses which are energized by either offsite power or emergency power from three emergency diesel generators (EDGs) {EK}.

After removal of the breaker from its switchgear cubicle an inspection of the cubicle found that one of the charging motor brushes was dislodged. The as-found condition suggests that during the last time the breaker was operated (January 11, 2008), the motor spring charge function was interrupted by a dislodged brush retaining screw leaving the breaker in a semi-charged condition. If the breaker is not fully charged, closing interlocks are not satisfied and will prevent breaker closing. The supply breaker for the 31 SIP is a Westinghouse {W120}, Type DS-416 480 VAC breaker {BKR}.

An extent of condition (EOC) review determined that DS type breakers are only used at unit 3. Unit 2 uses DB type breakers for safety related applications which are solenoid operated and do not have charging motors. An EOC visual inspection of in-service 480 VAC breakers at unit 3 was performed and verified that all breaker spring charge indicators were visible and indicated their correct status (charged or discharged). A breaker for the 31 Pressurizer backup heater has had its breaker flag indicator not visible but has operated several times and was determined to be acceptable. An historical review of DS type breakers at unit 3 determined there have been no failures due to a charging motor brush retaining screw dislodging. The breaker original equipment manufacturer (Westinghouse) reviewed the failure history of DS breakers and did not identify any events, in any plants using type DS breakers that had failures of this type. Engineering concluded the failure was an isolated case.

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Recognizing that all plant DS breakers were overhauled by Westinghouse and that the charging spring motors for the DS breakers are identical, a corrective action was initiated to perform an inspection of a representative sample of DS breakers.

Cause of Event

The cause of the breaker not closing was a failure of the breaker spring charging motor closing springs to fully charge. The cause of the closing springs not to fully charge was a failure of the breaker motor brush assembly to remain intact during operation resulting in failure to energize the motor on demand. A breaker motor brush retaining screw became dislodged allowing the motor brush to detach from the motor resulting in an interruption of power to the motor circuit. The cause of the retaining screw becoming dislodged could not be determined. The breaker was successfully operated for approximately 10 years and was last overhauled in 1998 when the charging motor was replaced. A contributing cause was a lack of a requirement to inspect the motor brush retaining screws and brush assembly. Industry did not have any vendor guidance or recommendations for inspections of the motor brush retaining screws and brush assembly.

Corrective Actions

The following corrective actions have been or will be performed under Entergy's Corrective Action Program to address the cause and prevent recurrence:

- The breaker spring charging motor was replaced and the breaker tested and returned to service.
- An EOC visual inspection of in-service 480 VAC breakers at unit 3 was performed and verified that all breaker spring charge indicators were visible and indicated their correct status (charged or discharged).
- Breaker Preventive Maintenance procedure 0-BKR-004-ELC was enhanced to include a requirement to perform an inspection of the breaker motor brush retaining screws and brush assembly.
- A sample of DS breakers (18) were selected for inspection of the breaker brush assembly hardware on their spring charging motors. The inspection of the breakers is scheduled for completion by May 30, 2008.

Event Analysis

The event is reportable under 10CFR50.73(a)(2)(i)(B). The licensee shall report any operation or condition which was prohibited by the plant TS. The Action Statement for the ECCS Technical Specification (TS) Limiting Condition for Operation (LCO), TS 3.5.2 requires three trains of ECCS to be operable. The required action A.1 for TS 3.5.2 Condition A, one or more trains inoperable, is to restore the train(s) to operable within a completion time of 72 hours. This event meets the reporting criteria because the 31 SIP was determined to be inoperable on January 27, at 09:02 hours, and was last operated successfully on January 11, 2008, at 02:29 hours. The inoperable condition during past operation exceeded the 72 hours allowed completion time for TS 3.5.2 and the required actions were not performed.

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NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

During the time the 31 SIP was inoperable (January 11, through January 27, 2008), both the 32 SIP and the 33 SIP were operable and available to perform their safety function. During this time period, both offsite power and onsite emergency power supplies (EDGs) for the redundant 32 and 33 SIPs were operable. In accordance with reporting guidance in NUREG-1022, an additional random single failure need not be assumed in that system during the condition. Therefore, there was no safety system functional failure of the SIS reportable under 10 CFR 50.73(a)(2)(v).

Past Similar Events

A review was performed of Licensee Event Reports (LERs) for the past three years for any events reporting TS prohibited conditions due to failed breakers. No LERs were identified that reported events based on this cause. LER-2007-001 reported an event at unit 2 on January 2, 2007, regarding a failure of the 21 Residual Heat Removal breaker. However, the Unit 2 480 VAC breakers are Type DB and this failure was due to a failure of the inertia latch to reset as a result of binding. Therefore, the Unit 2 event is not similar.

Safety Significance

This event had no effect on the health and safety of the public. There were no actual safety consequences for the event because there were no accidents or transients requiring the SIS. During the inoperability of the 31 SIP, the remaining two SI trains were operable. Therefore, in accordance with design, adequate SI capability was available with the remaining SIPs.

An assessment was performed to determine the impact of the condition on Core Damage Frequency (CDF) and the resultant Incremental Core Damage Probability (ICDP) considering the condition for 17 days. The risk assessment of one inoperable SI train from January 11 to January 27, 2008, determined an incremental CDF of 5.21E-7/year. Given a 17 day period of inoperability of the 31 SIP, the resulting ICDP was determined to be 2.43E-8. This risk impact is considered not significant.