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**Fred Dacimo**  
Vice President, Operations

October 1, 2003

Re: Indian Point Unit No. 3

Docket No. 50-286  
NL-03-151

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

Subject: Licensee Event Report 2003-004-00, "Plant in a Condition Prohibited by Technical Specifications due to Late Recognition of Inoperable Battery as a Result of Improper Document Use"

Dear Sir:

Pursuant to 10 CFR 50.73(a)(1), Entergy Nuclear Operations Inc. (Entergy) hereby provides Licensee Event Report (LER) 2003-004-00. The enclosed LER identifies an event where the plant was operated in a condition prohibited by Technical Specifications, which is reportable under 10 CFR 50.73(a)(2)(i)(B). This condition has been recorded in the Entergy Corrective Action Program as Condition Report CR-IP3-2003-04536.

No regulatory commitments are being made by Entergy in this correspondence.

Should you have any questions regarding this submittal, please contact Mr. John McCann, Manager, Licensing at (914) 734-5074.

Sincerely,

A handwritten signature in black ink, appearing to be "Fred R. Dacimo", written over a horizontal line.

Fred R. Dacimo  
Vice President, Operations  
Indian Point Energy Center

cc: next page

IE22

cc: Mr. Hubert J. Miller  
Regional Administrator – Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406-1415

Resident Inspector's Office  
Indian Point Unit 3  
U.S. Nuclear Regulatory Commission  
P.O. Box 337  
Buchanan, NY 10511-0337

Mr. Paul Eddy  
Public Service Commission  
3 Empire State Plaza, 10 Fl  
Albany, NY 12223-1350

INPO Record Center  
700 Galleria Parkway  
Atlanta, Georgia 30339-5957

Estimated burden per response to comply with this mandatory information 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB0202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.

**LICENSEE EVENT REPORT (LER)**

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

<b>1. FACILITY NAME</b> Indian Point Unit 3					<b>2. DOCKET NUMBER</b> 05000- 286					<b>3. PAGE</b> 1 OF 5				
<b>4. TITLE</b> Plant in a Condition Prohibited by Technical Specifications due to Late Recognition of Inoperable Battery as a Result of Improper Document Use														
<b>5. EVENT DATE</b>			<b>6. LER NUMBER</b>			<b>7. REPORT DATE</b>			<b>8. OTHER FACILITIES INVOLVED</b>					
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME			DOCKET NUMBER		
08	04	2003	2003	- 04 -	00	10	01	2003	FACILITY NAME			DOCKET NUMBER		
<b>9. OPERATING MODE</b>			<b>11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)</b>											
1			20.2201(b)			20.2203(a)(3)(ii)			50.73(a)(2)(ii)(B)			50.73(a)(2)(ix)(A)		
<b>10. POWER LEVEL</b>			20.2201(d)			20.2203(a)(4)			50.73(a)(2)(iii)			50.73(a)(2)(x)		
100			20.2203(a)(1)			50.36(c)(1)(i)(A)			50.73(a)(2)(iv)(A)			73.71(a)(4)		
			20.2203(a)(2)(i)			50.36(c)(1)(ii)(A)			50.73(a)(2)(v)(A)			73.71(a)(5)		
			20.2203(a)(2)(ii)			50.36(c)(2)			50.73(a)(2)(v)(B)			OTHER		
			20.2203(a)(2)(iii)			50.46(a)(3)(ii)			50.73(a)(2)(v)(C)			Specify in Abstract below or in NRC Form 366A		
			20.2203(a)(2)(iv)			50.73(a)(2)(i)(A)			x 50.73(a)(2)(v)(D)					
			20.2203(a)(2)(v)			x 50.73(a)(2)(i)(B)			50.73(a)(2)(vii)					
			20.2203(a)(2)(vi)			50.73(a)(2)(i)(C)			50.73(a)(2)(viii)(A)					
			20.2203(a)(3)(i)			50.73(a)(2)(ii)(A)			50.73(a)(2)(viii)(B)					
<b>12. LICENSEE CONTACT FOR THIS LER</b>														
NAME Joan F. Etzweiler, Operations Staff										TELEPHONE NUMBER (Include Area Code) (914) 734-8207				
<b>13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT</b>														
CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX					
<b>14. SUPPLEMENTAL REPORT EXPECTED</b>										<b>15. EXPECTED SUBMISSION DATE</b>		MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)					X NO									
<b>16. ABSTRACT</b> (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)														
<p>At about 1045 hours on August 4, 2003, cell 26 on the 31 Battery failed a surveillance test. An operability evaluation concluded the battery was operable and did not recognize that the Technical Specification (TS) limit on the cell voltage was not met. The error was identified at 1010 hours on August 5, 2003, and the TS action statement for the 31 Battery was entered. The TS action statement for two inoperable Emergency Diesel Generators (EDG) was also entered because the 31 Battery was required for 33 EDG field flashing and the 31 EDG was out of service for maintenance. The battery was restored to service and the TS action statements were exited prior to a required plant shutdown. The cause of this event was work practices - document use practices - documents not followed correctly. The Shift Manager did not directly consult the TS and did not follow the surveillance procedure requirement to take required TS action. Corrective action includes performance of future operability determinations by Senior Reactor Operators (SRO) or Shift Technical Advisors (STA) with peer review approval by the Shift Manager, training on this event, and further evaluation of the condition of the degraded battery cell. This event had no significant effect on the public health and safety.</p>														

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**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**

The 31 Battery {BTRY} was declared inoperable on August 5, 2003, at 1010 hours due to low voltage on one battery cell. Unit 3 was placed in Technical Specification (TS) action statements 3.8.4.B (inoperable battery) and 3.8.1.E (two Emergency Diesel Generators (EDG) {DG} inoperable). The battery was repaired and declared operable at 1738 hours, prior to required entry into Mode 3. The entry into the TS action statements was made at 1010 hours following the Shift Manager's (SM) recognition that an error had been made in not declaring the battery inoperable at about 1100 hours on August 4, 2003. The battery cell low voltage had been identified during a surveillance test and the test results were discussed with the SM at about 1100 hours. The initial test failure and the subsequent entry into TS actions were identified in plant Condition Reports CR-IP3-2003-4514 and CR-IP3-2003-4536.

This event was evaluated in a root cause analysis report. At about 1045 hours on August 4, 2003, cell 26 in 31 Battery failed surveillance test 3-PT-Q01A on low cell voltage. The Supervisor for the test informed the SM and discussed reasons why he believed that the battery remained operable. The SM made an error at this time. The SM did not directly consult the TS or follow verbatim the direction in 3PT-Q01A to take the required Technical Specification 3.8.6 action. Although the operability issue was failure of a battery cell, the evaluation by Engineering looked at how many cells were required for 31 Battery to meet its required design function. This was the response that had been requested. Consequently, the engineering review did not consider the requirement in TS 3.8.6 for each connected cell. As a result, the test Supervisor reported a conclusion that the battery was operable to the SM who accepted this conclusion.

On August 5, the NRC Resident and engineering representatives discussed the operability and looked at TS 3.8.6 "Battery Cell Parameters." Later, the NRC Resident and SM discussed operability in the context of TS 3.8.6. At that time, the SM recognized the error made in not declaring the battery inoperable on August 4. The SM declared 31 Battery inoperable as of 1010 hours on August 5 and entered TS action statement 3.8.4.B.1. The SM also entered TS action statement 3.8.1.E for two EDG inoperable. The 31 EDG had been taken out of service for maintenance at 0400 hours and the 33 EDG required the 31 Battery for field flashing so it was also considered inoperable. A protective tag out was issued at 1517 hours and the battery was disconnected by opening the battery connections to the bus and to the battery charger. At 1738 hours 31 Battery was declared operable following replacement and testing of cell 26.

There were no other surveillance tests requiring an operability determination at the time so the event was limited to the 31 Battery.

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**CAUSE OF EVENT**

The root cause was work practices - document use practices- documents not followed correctly. The SM did not directly consult the TS and did not follow verbatim the direction in 3PT-Q01A to take the required TS action.

A contributing cause was work practices - error detection practices - peer checking not applied to ensure correct determination with adequate basis. The SM overly relied on engineering review results and did not seek peer review from an SRO or STA.

Another contributing cause was verbal communications - pertinent information was not transmitted. Although the operability issue was failure of a battery cell, the System Engineer was asked how many cells were required for 31 Battery to meet its required design function, so the engineering review did not consider TS 3.8.6

**CORRECTIVE ACTIONS**

The following corrective actions have been or will be performed under the corrective action program to address the cause and prevent recurrence:

1. Testing is being scheduled to evaluate whether the 31 Battery was functional with degraded cell 26 in service.
2. The Operations Manager communicated the expectation that operability determinations will be performed by a SRO or STA and approved by the SM to achieve the advantages of peer review.
3. This internal operating experience (OE) has been added to the 2003 third session of the Engineering Support Program continuing training.
4. The Operations Department Training Coordinator will present the OE to the Operations Training Review Group for inclusion as an illustration or case study in SRO Initial License and License Regualification Training on TS usage and/or operability determination by 11/21/03.

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## EVENT ANALYSIS

The event is reportable under 10 CFR 50.73(a)(2)(i)(B), any operation or condition that was prohibited by plant Technical Specifications. Although not recognized at the time, the 31 Battery was inoperable about 1100 hours on August 4, 2003 when the test was performed and reviewed by the SM. The battery remained inoperable until 1738 hours on August 5. The TS 3.8.4.C.1 requirement was exceeded by 22 hours and 38 minutes. The late recognition of the inoperable battery also resulted in TS 3.8.1.F being exceeded by 5 hours and 38 minutes (1200 hours until 1738 hours) unless failure analysis shows the cell could have provided field flashing for the 33 EDG. The event is also reportable under 10 CFR 50.73(a)(2)(v)(D), any event or condition that could have prevented the fulfillment of a safety function necessary to mitigate the consequences of an accident. The 31 EDG was declared inoperable at 0400 hours on August 5, 2003 while Battery 31 was inoperable. Battery 31 provides field flashing and is required for 33 EDG to be operable. Therefore, a loss of the onsite AC power system {EK} EDG function occurred for up to 13 hours and 38 minutes. If failure analysis shows the 31 Battery could have provided flashing for the 33 EDG, the loss of safety function may be reduced to one hour and 22 minutes.

## PAST SIMILAR EVENTS

A review of Licensee Event Reports reporting operation outside TS or safety system functional failures over the last two years identified the following:

- LER 2002-001 reported an inoperable Service Water pipe caused by a leak that was reportable when the allowed outage time was exceeded. Enforcement discretion allowed the outage time to be exceeded.
- LER 2002-002 reported an inoperable Isolation Valve Seal Water System due to a mispositioned valve. This condition was outside TS and a safety system functional failure. The cause of the mispositioning of the valve was human error, the failure to perform all system restoration steps during performance of a surveillance test.

## EVENT SAFETY SIGNIFICANCE

These conditions had no significant effect on the health and safety of the public.

The 31 Battery is part of DC electrical power {EJ} subsystem 31, which supplies normal and emergency DC electrical power for 33 EDG, and control and switching for 480 volt Bus {BU} 5A loads. The subsystem also supplies one of the four 120 V AC vital instrument {EB} buses via 31 Static Inverter {INVT}. The 31 Static Inverter, in turn, powers:

- one of the four Reactor Protection System (RPS) {JC} instrumentation channels.

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- one of the two trains of ESFAS instrumentation logic.
- one of the four Engineered Safety Features Actuation System (ESFAS) {JE} instrumentation channels.
- one of the two trains of RPS instrumentation actuation logic.

There were no actual safety consequences for this event because the plant systems were not required due to any events while the battery was inoperable.

The safety significance was also evaluated based on risk and determined to be non-risk significant. The most conservative case is considering the 31 Battery out of service for 31 hours (1100 hours on August 4 to 1800 hours on August 5) with the 31 EDG concurrently out of service for 14 hours (0400 to 1800 hours on August 5). The increase in core damage probability for this condition is  $3.91\text{E-}7$ , which is not risk significant. Engineering judgment indicates that the 31 Battery would have remained operable, except for the one hour and 22 minutes when it was isolated for repairs, long enough to flash the field of the 33 EDG so that two EDG would have been functional and possibly for the two hour duty cycle. The testing of Cell 26 that is currently being scheduled will establish the extent of battery operability and could change the core damage probability. The increase in core damage probability for the 31 Battery out of service for 31 hours and the two EDG out of service for one hour and 22 minutes is  $1.04\text{E-}7$ . The increase in core damage probability for the 31 Battery and the two EDG out of service for one hour and 22 minutes (i.e., within the TS allowed outage time) is  $3.78\text{E-}8$ .