

Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Plant
Bridgman, MI 49106
616 465 5901



December 22, 1999

United States Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Operating License DPR-58
Docket No. 50-315

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following interim report is being submitted:

LER 315/99-S005-00, "Unqualified Contract Security Officer Standing Post Without Appropriate Supervisory Oversight".

No new commitments were identified in this submittal:

Sincerely,

A handwritten signature in black ink, appearing to read 'A. Bakken' with a circled 'III' to the right.

A. Christopher Bakken, III
Site Vice President

/mbd
Attachment

c: J. E. Dyer, Region III
R. C. Godley
D. Hahn
W. J. Kropp
R. P. Powers
R. Whale
NRC Resident Inspector
Records Center, INPO

JE 22/1,

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LICENSEE EVENT REPORT (LER)

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

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), 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. If 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.

FACILITY NAME (1)
 Donald C. Cook Plant Unit 1

DOCKET NUMBER (2)
 05000-315

PAGE (3)
 1 OF 3

TITLE (4)
 Unqualified Contract Security Officer Standing Post Without Appropriate Supervisory Oversight

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
11	22	1999	1999	S005	00	12	22	1999	Donald C. Cook Unit 2	05000-316
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9)	POWER LEVEL (10)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)								
--	00	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)					
		20.2203(a)(1)	20.2203(a)(3)(i)	50.73(a)(2)(ii)	50.73(a)(2)(x)					
		20.2203(a)(2)(i)	20.2203(a)(3)(ii)	50.73(a)(2)(iii)	73.71					
		20.2203(a)(2)(ii)	20.2203(a)(4)	50.73(a)(2)(iv)					<input checked="" type="checkbox"/> OTHER	
		20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)					Specify in Abstract below or in NRC Form 366A	
		20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)						

LICENSEE CONTACT FOR THIS LER (12)

NAME M. B. Depuydt, Regulatory Compliance	TELEPHONE NUMBER (Include Area Code) (616) 465-5901 X1589
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).				<input checked="" type="checkbox"/> NO			

On November 22, 1999, at approximately 0605 hours EST, it was discovered that a security officer, who had been assigned to perform vital area access control, perimeter access control, and search processes, was not qualified to stand watch. An investigation identified that the individual had completed the appropriate training and was certified on October 26, 1999, as required by the Modified Amended Security Plan. Subsequent to the individual's certification, performance weaknesses were observed such that security management deemed it necessary to return the officer to an on-the-job training status on November 1, 1999. Although the individual's certification was not officially withdrawn, this action was consistent with previous practice, which allowed an individual to continue to perform security-related duties under direct supervision. However, on November 22, 1999, it was identified that the individual had performed security-related duties without the required oversight of another certified officer for a period of eight hours. As such, an ENS notification was made the same day at 0633 hours.

The cause for this event was the lack of specific instruction regarding the de-certification and remediation of security personnel who fail to adequately perform critical duties. Upon discovery, the individual was immediately removed from the duty location and replaced with a qualified individual. The security supervisors were counseled on November 22, 1999, that only fully certified individuals would be assigned security-related duties. Security procedures will be revised to provide detailed instructions regarding the de-certification and remediation process.

This event did not impact the safety of the plant. A review of security computer logs during the eight-hour period the individual was performing unsupervised duties found no evidence of unauthorized personnel entry into any vital or protected area of the plant. Also, interview information regarding the number of personnel processing through the security portals was verified consistent with the computer logs. At no other time was the individual on duty without oversight.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Donald C. Cook Plant Unit 1	05000-315	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		1999	S005	00	

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

Conditions Prior to Event

Unit 1 was defueled
Unit 2 was defueled

Description of Event

On November 22, 1999, at approximately 0605 hours EST, it was discovered that a security officer, who had been assigned to perform security-related duties, was not qualified to stand post. It was identified that the officer had been performing duties that included vital area access control, perimeter access control, and search processes. 10CFR Part 73, Appendix B, paragraph B, requires an individual to be qualified in accordance with the licensee's NRC-approved training and qualification plan prior to being assigned to perform security-related job duties. The Donald C. Cook Modified Amended Security Plan (MASP), Appendix B, specifies that prior to allowing security personnel on duty, they will be certified by a licensee representative, and that the individual has met all applicable criteria for those duties and responsibilities. The allowance of an individual to stand post without adequately meeting these criteria represents a violation of the Security Plan requirements.

An investigation identified that the individual had completed the appropriate training and was certified on October 26, 1999, as required by the MASP. Subsequent to the individual's certification, performance weaknesses were observed such that security management deemed it necessary to return the officer to an on-the-job training status on November 1, 1999. Although the individual's certification was not officially withdrawn, this action was consistent with previous practice, which permitted an individual to continue performing security-related duties while under direct observation. However, on November 22, 1999, it was identified that the individual had performed security-related duties without the required oversight of another certified officer for a period of eight hours.

Cause of Event

The cause for this event was the lack of specific instruction regarding the de-certification and remediation of security personnel who fail to adequately perform critical security duties. Contributing causes included the failure of the individual to exhibit a questioning attitude regarding his qualification to stand watch, and the failure of the security supervisors to ensure the necessary oversight was provided during the watch period on November 22, 1999.

Analysis of Event

This event was reportable as a safeguards event pursuant to the requirements of 10CFR73, Appendix G, paragraph I(c), for "any failure, degradation, or the discovered vulnerability in a safeguards system that could allow unauthorized or undetected access to a protected area, vital area, or transport for which compensatory measures have not been employed," and 10CFR73.71(b)(1) (1-hour ENS report). An ENS notification was made on November 22, 1999, at 0633 hours. This report is being submitted in accordance with 10CFR73, Appendix G, (I)(c) and 10CFR73.71(d) (30-day report).

The actions performed by the individual did not impact the safety of the plant. A review of security computer logs during the eight-hour period the individual was performing unsupervised security officer duties found no evidence of unauthorized personnel entry into any vital or protected area of the plant. Also, the individual was interviewed regarding the number of personnel that processed through the security portals. This information was verified against log records and found to be

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
Donald C. Cook Plant Unit 1	05000-315	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 3
		1999	S005	00	

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

Corrective Actions

Upon discovery, the individual was immediately removed from the duty location and replaced with a qualified individual. It was also communicated to security supervisors that the individual's certification had been officially withdrawn, and that he would not return to duty until adequate job proficiency could be demonstrated.

The security supervisors and officers were counseled on November 22, 1999, that only fully certified individuals would be assigned security-related duties. Whenever personnel who are certified to perform security duties fail to perform their required duties satisfactorily, they shall be immediately decertified, removed from any work roster until they are remediated, re-certified and only then allowed to resume their duties independently.

A verification of computer logs was performed to determine whether any unauthorized entries had been made into the protected or vital areas during the eight-hour period the officer stood watch. This information was compared with statements provided by the officer during an interview regarding the ingress and egress of plant personnel. His statements were found to be accurate. The review found no evidence of unauthorized entries into the protected or vital areas during the time period in question.

As a long-term corrective action, security procedures will be revised to provide detailed instructions regarding the de-certification and remediation process. Specifically, individuals who fail any portion of their regulatory required duties will be immediately de-certified and removed from the shift roster and work schedule. Documentation will be generated indicating the failed portion of the training criteria, time of de-certification, period of re-training and demonstration by the individual of proficiency in the failed task. This information will be provided to security supervisory personnel to ensure that in the future, only fully certified individuals are standing post.

Similar Events

None

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December 22, 1999

United States Nuclear Regulatory Commission
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Washington, DC 20555

Operating License DPR-58
Docket No. 50-315

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following interim report is being submitted:

LER 315/99-009-01, "As-Left Residual Heat Removal Safety Relief Valve Lift Setpoint Greater than Technical Specification Limit".

The following commitments were identified in this submittal:

- The appropriate IST procedures will be revised to ensure that the as-left lift setpoint for 1-SV-103 and 2-SV-103 are in accordance with the required TS value. This will be completed prior to Mode 6 for each unit.
- The 1-SV-103 and 2-SV-103 lift setpoints will be reset in accordance with the TS limit. This will be completed prior to Mode 6 for each unit.
- An upper tier procedure will be prepared that will describe the requirements for the implementation of the Safety/Relief Valve Program to ensure that all aspects of applicable codes and regulatory requirements are accounted for and that the program will be in full compliance with the requirements.

Sincerely,

A handwritten signature in black ink, appearing to read "M. W. Rencheck".

M. W. Rencheck
Vice President – Nuclear Engineering

/mbd
Attachment

c: J. E. Dyer, Region III
R. C. Godley
D. Hahn
W. J. Kropp
R. P. Powers
R. Whale
Records Center, INPO
NRC Resident Inspector

LICENSEE EVENT REPORT (LER)

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

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-6 F33), 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

FACILITY NAME (1) Cook Nuclear Plant Unit 1		DOCKET NUMBER (2) 05000-315	PAGE (3) 1 of 3
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TITLE (4)
As-Left Residual Heat Removal Safety Relief Valve Lift Setpoint Greater than Technical Specification Limit

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
03	04	1999	1999	-- 009	-- 01	12	22	1999	D.C. Cook, Unit 2	05000-316
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)									
POWER LEVEL (10) 00	20.2201 (b)		20.2203(a)(2)(v)		<input checked="" type="checkbox"/>	50.73(a)(2)(i)		50.73(a)(2)(viii)		
	20.2203(a)(1)		20.2203(a)(3)(i)			50.73(a)(2)(ii)		50.73(a)(2)(x)		
	20.2203(a)(2)(i)		20.2203(a)(3)(ii)			50.73(a)(2)(iii)		73.71		
	20.2203(a)(2)(ii)		20.2203(a)(4)			50.73(a)(2)(iv)		OTHER		
	20.2203(a)(2)(iii)		50.36(c)(1)			50.73(a)(2)(v)		Specify in Abstract below or n NRC Form 366A		
20.2203(a)(2)(iv)		50.36(c)(2)			50.73(a)(2)(vii)					

LICENSEE CONTACT FOR THIS LER (12)	
NAME M. B. Depuydt, Regulatory Compliance	TELEPHONE NUMBER (Include Area Code) (616) 465-5901 x1589

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)									
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)		
YES (If Yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/>	NO		MONTH	DAY	YEAR

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

On March 4, 1999, during the Expanded System Readiness Review of the Residual Heat Removal (RHR) system, several concerns were identified regarding the Unit 1 and Unit 2 Technical Specification (TS) RHR shutdown cooling suction relief valve lift setpoints for Reactor Coolant System (RCS) Low Temperature Overpressurization Protection (LTOP). TS 3.4.9.3 requires the RHR safety valves to have a lift setting of less than or equal to 450 psig in Mode 5 when the temperature of any RCS cold leg is less than or equal to 152 degrees F, and in Mode 6 when the head is on and fastened to the reactor vessel and the RCS is not vented through a 2 square inch or larger vent, or through any single blocked open Power Operated Relief Valve. This TS value is an absolute value that does not include an allowable ASME Code setpoint tolerance of 3 percent. A review of recent IST data identified that the as-left lift setpoints for 1-SV-103 and 2-SV-103 were 455 and 452 psig, respectively. As a result, the valves were declared inoperable on March 10, 1999.

The root cause for this condition was incorrect implementation of the TS RHR relief valve lift setpoint requirement due to a lack of understanding of the Technical Specifications. The appropriate IST procedures will be revised to ensure that the as-left lift setpoints for 1-SV-103 and 2-SV-103 are below the required TS value of 450 psig, and the valves will then be reset appropriately. The procedures will be revised and the setpoints reset prior to Mode 6. Personnel in the Engineering Programs group will attend a familiarization session to ensure their understanding of Technical Specification requirements. Enhancements to the procedure that governs the review and implementation of newly granted TS amendments had been previously made, and no further changes are required.

The condition has been evaluated to determine the safety significance. Based on an adequate margin of protection during LTOP conditions, this condition has been determined to be of minimal safety significance.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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		1999	--	009	--	

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

Conditions Prior to Event

Unit 1 was in Mode 5, Cold Shutdown
Unit 2 was in Mode 5, Cold Shutdown

Description of Event

On March 4, 1999, during the Expanded System Readiness Review of the Residual Heat Removal (RHR) system, several concerns were identified regarding the Unit 1 and Unit 2 Technical Specification (TS) RHR shutdown cooling relief valve (SV-103) lift setpoints for Reactor Coolant System (RCS) Low Temperature Overpressurization Protection (LTOP).

TS 3.4.9.3 requires the RHR safety valves to have a lift setting of less than or equal to 450 psig in Mode 5 when the temperature of any RCS cold leg is less than or equal to 152 degrees F, and in Mode 6 when the head is on and fastened to the reactor vessel and the RCS is not vented through a 2 square inch or larger vent, or through any single blocked open Power Operated Relief Valve. This TS value is an absolute value that does not include an allowable ASME Code setpoint tolerance of 3 percent. A review of recent Inservice Testing (IST) data identified that the as-left lift setpoints for 1-SV-103 and 2-SV-103 were 455 and 452 psig, respectively. As a result, the valves were declared inoperable on March 10, 1999.

In 1982, LTOP requirements for the PORV and RHR safety relief valve lift setpoints and testing requirements were incorporated into the Technical Specifications. TS 3.4.9.3.a requires the RHR relief valve to have a lift setting of less than or equal to 450 psig. However, the TS surveillance requirement 4.4.9.3.2 required testing to be performed in accordance with ASME IST requirements. The IST procedure that existed in 1982 specified a relief valve lift setpoint value of 450 psig, without mention of a Code allowance for setpoint tolerance or reference to the TS setpoint limit of 450 psig. In 1987, a setpoint tolerance of 3 percent was incorporated in the test procedure. However, the surveillance procedures did not reference the TS requirement of less than or equal to 450 psig. As such, the valves were set in accordance with procedural and ASME Code requirements, at 450 psig with a 3 percent tolerance, which resulted in valve lift setpoints above the TS value of 450 psig.

Cause of Event

The root cause for this condition was incorrect implementation of the TS RHR relief valve lift setpoint requirement. When the 450 psig RHR relief valve setpoint was incorporated into the TS in 1982, no allowance for Code tolerances was included. The testing procedures, which actually specified a setpoint of 450 psig, were not revised to reference the new TS requirements based on the perception by IST personnel that the TS values were target values and not an absolute limit. This perception continued to prevail and in 1987, when the testing procedures were revised, setpoint tolerances were incorporated even though there was no provision in the TS for them.

Analysis of Event

In accordance with 10CFR50.73(a)(2)(i)(B), this LER is submitted for a condition prohibited by plant Technical Specifications.

The Low Temperature Overpressurization Protection system protects the RCS from anticipated or inadvertent heat addition or mass injection events that could result in the reactor vessel pressure and temperature limits exceeding the limits defined in Appendix G of 10 CFR Part 50. During startup and shutdown conditions at low temperature, especially in a water solid condition, the RCS pressure may exceed the pressure-temperature limits established for protection against brittle fracture failure of the reactor vessel. The LTOP system utilizes two PORVs and one RHR relief valve (SV-103) to maintain RCS pressure below design limits. Only one Centrifugal Charging pump (CCP) is allowed to be operable whenever LTOP requirements are in effect. The other CCP and both Safety Injection (SI) pumps are required to be inoperable with their breakers removed from the circuit. This ensures that a mass addition pressure transient can be relieved by the operation

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

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		1999	--	009	--	

Cook Nuclear Plant Unit 1

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

of a single PORV. During the period of time when the lift setting on the RHR relief valves were incorrectly set, there were no events recorded where more than the single pump allowed by TS was capable of injecting.

The RHR relief valve, in conjunction with one LTOP PORV, is required to mitigate the pressure transient caused by injection of two CCPs. Both of these scenarios use an RHR relief valve lift setpoint of 450 psig to protect the reactor vessel and RHR piping. The analysis performed by Westinghouse included a 3 percent uncertainty to account for valve set pressure. A review of Westinghouse documents, "Analysis of Capsule U from the Indiana Michigan Power Company D.C. Cook Unit 1 and Unit 2 Reactor Vessel Radiation Surveillance Program," identified that the Unit 1 32-year effective full power years (EFPY) pressure limit at 100 degrees F is 529 psig, and the Unit 2 15-year EFPY at 100 degrees F is 522 psig. These pressure limits are above the RHR pump suction safety valve lift setting even with the worst case set point of 460 psig identified by the investigation. Consequently, adequate margin existed to protect the reactor vessel during low temperature overpressure conditions.

Based on an adequate margin of protection during LTOP conditions, and the protection afforded by the adherence to the TS requirement to remove power from the second CCP and both SI pumps, this condition has been determined to be of minimal safety significance.

Corrective Actions

The appropriate IST procedures will be revised to ensure that the as-left lift setpoint for 1-SV-103 and 2-SV-103 are in accordance with the TS limit of 450 psig. The 1-SV-103 and 2-SV-103 safety valve lift setpoints will then be reset in accordance with the TS limit. These actions will be completed prior to Mode 6 for each unit.

A review of other TS safety and relief valve lift setpoints was performed to determine if additional TS setpoints were affected. Results of the evaluation found that TS lift setpoint tolerances were appropriately applied during valve testing.

A refresher session was held with the program managers in the Engineering Programs group to reinforce expectations regarding TS compliance, understanding of TS requirements versus Code requirements, and the relationship between TS values and Code allowances.

In addition, an upper tier procedure will be prepared that will describe the requirements for the implementation of the Safety/Relief Valve Program. This will ensure that all aspects of applicable codes and regulatory requirements are accounted for and that the program will be in full compliance with these requirements.

The procedures that govern TS amendment submittal and implementation of the granted amendment have been reviewed. The procedures were upgraded in May 1999 and were found to be satisfactory in their guidance regarding validation of technical information that is included in the submittal, and the requirements for implementation of the amendment once granted. The procedures did not require additional revision as a result of the identified condition.

As previously stated in correspondence AEP:NRC:1260GH, dated March 19, 1999, "Enforcement Actions 98-150, 98-151, 98-152 and 98-186, Reply to Notice of Violation Dated October 13, 1998," a comprehensive review of the adequacy of TS surveillance test procedures is being performed. This action is being tracked by Restart Action Plan #0001, "Programmatic Breakdown in Surveillance Testing".

Previous Similar Events

- 315/98-054-00
- 315/99-002-00
- 315/99-004-00