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Nuclear Business Unit

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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Gentlemen:

**LICENSEE EVENT REPORT 354/00-007-00
HOPE CREEK GENERATING STATION
FACILITY OPERATING LICENSE NO. NPF-57
DOCKET NO. 50-354**

This Licensee Event Report entitled "Unplanned Scram During Post-Maintenance Testing While Shutdown" is being submitted in accordance with the requirements of 10CFR50.73(a)(2)(iv) as an event or condition that resulted in a manual or automatic actuation of an Engineered Safety Feature.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Bezilla".

Mark Bezilla
Vice President - Operations

Attachment

PRD

C: Distribution:
LER File

The power is in your hands.

RG4-001

A handwritten signature in black ink, appearing to read "IE22".

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION (6-1998)					APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001 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.					
LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)										
FACILITY NAME (1) Hope Creek Generating Station					DOCKET NUMBER (2) 05000354		PAGE (3) 1 OF 4			
TITLE (4) Unplanned Scram During Post-Maintenance Testing While Shutdown										
EVENT DATE (5) MONTH DAY YEAR			LER NUMBER (6) YEAR SEQUENTIAL NUMBER REVISION NUMBER			REPORT DATE (7) MONTH DAY YEAR			OTHER FACILITIES INVOLVED (8) FACILITY NAME DOCKET NUMBER	
05 13 00			00 -- 007 -- 00			06 12 00			FACILITY NAME DOCKET NUMBER 05000	
OPERATING MODE (9)		5		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)						
POWER LEVEL (10)		0		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)(iii)		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)		X 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 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 Paul Duke, Licensing Engineer					TELEPHONE NUMBER (Include Area Code) 856-339-1466					
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).				X NO						
ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)										
<p>On May 13, 2000, a Reactor Protection System (RPS) scram occurred due to high level in the scram discharge volume (SDV) during post-maintenance testing of one of the Alternate Rod Insertion (ARI) valves. The SDV high level scram signal was generated as a result of a manually initiated ARI scram. This event is reportable as an actuation of an Engineered Safety Feature in accordance with the requirements of 10 CFR 50.73(a)(2)(iv) since the SDV high level scram was not expected to occur as a result of the test. The apparent cause for this event was personnel error. Both the ARI manual initiation and the SDV high level scram functioned as designed; however, based upon an incorrect understanding of the ARI manual initiation logic, personnel performing the test planned to close the ARI valves before the SDV high level scram setpoint was reached. By design, the manual ARI initiation signal seals in and can be reset only after a thirty second time delay. There were no actual safety consequences associated with this event. Corrective actions included resetting the ARI manual initiation and the SDV high level scram in accordance with plant procedures and communicating lessons learned from this event to Operations personnel.</p>										

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

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		00	-- 007 --	00	

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

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
Redundant Reactivity Control System EIIS Identifier {JC/HS}*

* Energy Industry Identification System (EIIS) codes and component function identifier codes appear as {SS/CC}

IDENTIFICATION OF OCCURRENCE

Event Date: May 13, 2000
Discovery Date: May 13, 2000

CONDITIONS PRIOR TO OCCURRENCE

The plant was in OPERATIONAL CONDITION 5 (REFUELING). No structures, systems, or components were inoperable at the time of the occurrence that contributed to the event.

DESCRIPTION OF OCCURRENCE

On May 13, 2000, at 1326 hours, a Reactor Protection System (RPS) scram occurred due to high level in the scram discharge volume (SDV) during post-maintenance testing of one of the Alternate Rod Insertion (ARI) valves. The post-maintenance test required the local ARI test switches to be placed in "test". The ARI valves opened, causing the scram air header to depressurize. All scram inlet and outlet valves opened and the SDV vent and drain valves closed as designed. The SDV high level scram signal was generated as a result of the manually initiated ARI scram. Core reloading was in progress and all control rods were fully inserted before this event.

Placing both local ARI test switches in "test" causes a manual ARI initiation. By design, the manual ARI initiation signal seals in and can be reset only after a thirty second time delay. Operations personnel performing the test believed incorrectly that the ARI valves would close as soon as the local test switches were returned to "normal." They planned to open the ARI valves only long enough to verify air flow through the valve being tested and to close the valves by returning the test switches to "normal."

This event is reportable as an actuation of an Engineered Safety Feature in accordance with the requirements of 10 CFR 50.73(a)(2)(iv) since the SDV high level scram was not expected to occur as a result of the test. A four hour notification was made to the NRC in accordance with 10 CFR 50.72(b)(2)(ii) on May 13, 2000 at 1625.

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APPARENT CAUSE OF OCCURRENCE

The apparent cause for this event was personnel error. Both the ARI manual initiation and the SDV high level scram functioned as designed; however, based upon an incorrect understanding of the ARI manual initiation logic, personnel performing the test planned to close the ARI valves before the SDV high level scram setpoint was reached. By design, the manual ARI initiation signal seals in and can be reset only after a thirty second time delay.

SAFETY SIGNIFICANCE AND IMPLICATIONS

There were no actual safety consequences associated with this event. Both the ARI manual initiation and the SDV high level scram functioned as designed. This event did not affect the health and safety of the public.

PREVIOUS OCCURRENCES

A review of previously reported events identified four instances within the last two years in which unplanned ESF actuations occurred due to personnel error.

LER 354/00-005-00 reported an event in which a reactor water cleanup system (RWCU) isolation occurred due to an inadvertent standby liquid control (SLC) initiation signal during surveillance testing. Performing three surveillance tests simultaneously resulted in the initiation logic being completed for the RRCS system to provide an initiation signal to the SLC system and isolate the RWCU system. Corrective actions included counseling the personnel involved and communicating lessons learned from this event to Maintenance personnel.

LER 354/00-004-00 reported an event in which a SDV high level scram resulted from an inadequate partial release of a tagout and untimely action to drain the SDV. Corrective actions included a review of tagouts in order to identify enhancements to prevent recurrence of this type of event.

LER 354/99-006-00 reported an event in which an unexpected actuation of the "B" channel Primary Containment Isolation System (PCIS) occurred when the "B" channel Radiation Monitoring System (RMS) was de-energized to replace a power supply. The cause of the event was an inadequate review of the RMS power supply replacement. Corrective actions included training on RMS power supply replacement evolutions.

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PREVIOUS OCCURRENCES (continued)

LER 354/98-008-00 reported an event in which the main turbine tripped due to high moisture separator level and the reactor scrammed automatically in response to the closure of the turbine control valves. The cause of the event was the inadvertent isolation of instrument air to the moisture separator drain tank level control valves due to an error in the piping and instrumentation diagram for the instrument air system.

Although these previous occurrences were caused by personnel error, the corrective actions taken for those LERs would not have been expected to prevent this event.

CORRECTIVE ACTIONS

1. The ARI manual initiation and the SDV high level scram were reset in accordance with plant procedures.
2. Lessons learned from this event will be communicated to Operations personnel.
3. The retest instructions for the periodic maintenance of ARI valves will be revised to reflect lessons learned from this event.

COMMITMENTS

The corrective actions cited in this LER are voluntary enhancements and do not constitute commitments.