

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Stephen L. Smith
Plant Manager

March 25, 2015

WO 15-0014

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

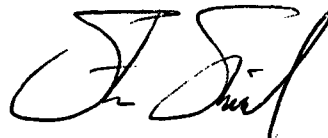
Subject: Docket No. 50-482: Licensee Event Report 2015-001-00, "Personnel Error Causes Two Inoperable Residual Heat Removal Trains"

Gentlemen:

The enclosed Licensee Event Report (LER) 2015-001-00 is being submitted pursuant to 10 CFR 50.73(a)(2)(v)(B) regarding an event or condition that could have prevented fulfillment of a safety function needed to remove residual heat at Wolf Creek Generating Station.

This letter contains no regulatory commitments. If you have any questions concerning this matter, please contact me at (620) 364-4093, or Mr. Steven R. Koenig at (620) 364-4041.

Sincerely,



Stephen L. Smith

SLS/rit

Enclosure

cc: M. L. Dapas (NRC), w/e
C. F. Lyon (NRC), w/e
N. F. O'Keefe (NRC), w/e
Senior Resident Inspector (NRC), w/e

IE22
NRR



LICENSEE EVENT REPORT (LER)
(See Page 2 for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-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 WOLF CREEK GENERATING STATION	2. DOCKET NUMBER 05000 482	3. PAGE 1 OF 4
--	--------------------------------------	--------------------------

4. TITLE Personnel Error Causes Two Inoperable Residual Heat Removal Trains

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	28	2015	2015	001	00	03	25	2015	FACILITY NAME	DOCKET NUMBER
										05000
										05000

9. OPERATING MODE 1

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)

<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 checked="" 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 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

FACILITY NAME Steven R. Koenig, Manager Regulatory Affairs	TELEPHONE NUMBER (Include Area Code) 620-364-4041
---	--

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

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

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR

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

On January 28, 2015, the nightshift operations crew implemented a clearance order to support planned maintenance on two Residual Heat Removal (RHR) System valves that included closing valves EJHV8716A and EJHV8809A. At 0534 hours on January 28, 2015, Condition C of Limiting Condition for Operation (LCO) 3.5.2 was entered upon determining that less than 100% of the Emergency Core Cooling System (ECCS) flow equivalent to a single OPERABLE ECCS train was available with valve EJHV8716A closed. Entry into LCO 3.0.3 in accordance with Required Action C.1 was made on two separate occasions. Action was taken to restore valves EJHV8716A and EJHV8809A to the open position and exit LCO 3.0.3.

The licensed operators involved with the preparation and implementation of the clearance orders did not recognize that current plant conditions could not support the proposed activity. The individuals involved with this event had their qualifications removed until remediation occurred. Red switch boxes have been placed on the control boards in the control room on the valves in procedure AP 26C-004, "Operability Determination and Functionality Assessment," Section A.16 that can cause an entry into LCO 3.0.3.



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

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@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 WOLF CREEK GENERATING STATION	2. DOCKET 05000 482	6. LER NUMBER			3. PAGE 2 OF 4
		YEAR	SEQUENTIAL NUMBER	REV NO.	
		2015	- 001	- 00	

NARRATIVE

PLANT CONDITIONS PRIOR TO THE EVENT

Mode - 1
Power - 100%

There were no systems, structure or components (SSC) that were inoperable at the start of the event and contributed to the event.

DESCRIPTION

In December 2014, clearance orders were prepared to support planned maintenance on valves EJFCV0610, Residual Heat Removal (RHR) pump A miniflow valve [EEIS Code: BP-V], and BNHV8812, Refueling Water Storage Tank (RWST) to RHR pump A suction valve [EEIS Code: BP-V]. The clearance orders support isolating all possible flow paths and were prepared by a non-licensed individual. The clearance orders as prepared close valve EJHV8809A, RHR cold leg injection loops 1 and 2 [EEIS Code: BP-V], and valve EJHV8716A, RHR discharge cross-tie [EEIS Code: BP-V], resulting in isolation of the flow path to two of the four cold leg injection nozzles for the RHR System [EEIS Code: BP]. The Technical Specification (TS) 3.5.2 Bases, Limiting Condition for Operation (LCO) Section, specifies that during an event requiring Emergency Core Cooling System (ECCS) actuation, a flow path is required to provide an abundant supply of water from the RWST to the Reactor Coolant System (RCS) via the ECCS pumps (RHR is a subsystem of the ECCS) and their respective supply headers to each of the four cold leg injection nozzles. On January 8, 2015, the senior license operator performing the tagging authority review of the clearance orders failed to ensure that the clearance orders would not adversely impact the plant.

On January 27, 2015, it was identified by the on-shift work control center (WCC) senior licensed operator reviewing the upcoming schedule that the on-shift operations crew would be hanging the clearance orders for taking the 'A' RHR train out of service for planned maintenance starting at 0500 hours on January 28, 2015. During the evening, the WCC senior licensed operator reviewed the clearance orders, referencing the drawings in the clearance order detail page and TS 3.5.2. During this review, the WCC senior licensed operator did not recognize that both trains of RHR would be rendered inoperable with the clearance orders place. The WCC senior licensed operator approved for issuing clearance orders at approximately 0310 hours on January 28, 2015.

On January 28, 2015, an extra licensed operator was assigned to hang the applicable clearance order tags that were located on the control boards in the control room. The licensed operator compared each tag to the tag hang list and compared the nomenclature on each valve to the hand switches ensuring the correct tag was placed on the correct component. On hand switch EJHIS8716A [EEIS Code: BP-LIS], the licensed operator compared the nomenclature on the tag to the hand switch, and the tag hang list. The components were then repositioned to obtain the desired configuration for the clearance order. While signing the clearance order tags in electronic clearance order database, the licensed operator identified information in the electronic data base and questioned the Control Room Supervisor (CRS) regarding the acceptability of closing valve EJHV8716A. The CRS reviewed procedure AP 26C-004, "Operability Determination and Functionality Assessment," Section A.16 of Attachment A, determined that closure of valve EJHV8716A results in the entry into LCO 3.0.3.

CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
WOLF CREEK GENERATING STATION	05000 482	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 4
		2015	- 001	- 00	

NARRATIVE

At 0534 hours on January 28, 2015, Condition C of LCO 3.5.2 was entered upon determining that less than 100% of the ECCS flow equivalent to a single OPERABLE ECCS train was available with valve EJHV8716A closed. Entry into LCO 3.0.3 in accordance with Required Action C.1 was made at 0535 hours. Actions were taken to restore valve EJHV8716A to the open position. LCO 3.0.3 was exited at 0550 hours. A review of Nuclear Plant Information System (NPIS) data determined that EJHV8716A was closed for 41 minutes.

Further review of this event by the WCC senior licensed operator identified that valve EJHV8809A was included in procedure AP 26C-004, Section A.16 of Attachment A and that closure of this valve results in entry into LCO 3.0.3. Entry into LCO 3.0.3 in accordance with Required Action C.1 was made at 0635 hours. Actions were taken to restore valve EJHV8809A to the open position. LCO 3.0.3 was exited at 0650 hours. A review of NPIS data determined that valve EJHV8809A was closed for 1 hour and 42 minutes.

REPORTABILITY

With less than 100% of the ECCS flow equivalent to a single OPERABLE ECCS train available, the plant is in a condition outside of the accident analysis. With both RHR trains inoperable, the plant was in a condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat. As such, this event is reportable under 10 CFR 50.73(a)(2)(v)(B).

The event was reported (EN #50772) under 10 CFR 50.72(b)(3)(v)(B) for an event that at the time of discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat.

CAUSE

The licensed operators involved with the preparation and implementation of the clearance orders did not recognize that current plant conditions could not support the proposed activity.

CORRECTIVE ACTIONS

The individuals involved with this event had their qualifications removed until remediation occurred. On January 29, 2015, WCGS Standing Order 36, Revision 0, "Tagging Authority Duties," was issued that specified guidance for clearance orders that affect equipment OPERABILITY.

On February 10, 2015, the electronic clearance order database was modified to identify the valves in procedure AP 26C-004, Section A.16 that can cause an entry into LCO 3.0.3.

On February 19, 2015, procedure AP 21D-003, "Control of Tagging Information," was revised to identify the use of red switch boxes for the valves in procedure AP 26C-004, Section A.16 that can cause an entry into LCO 3.0.3. Red switch boxes have been placed on the control boards in the control room on the valves in procedure AP 26C-004, Section A.16 that can cause an entry into LCO 3.0.3. The placement of the red switch boxes provides an awareness to the operator of the significance of the valve.

CONTINUATION SHEET

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
WOLF CREEK GENERATING STATION	05000 482	YEAR	SEQUENTIAL NUMBER	REV NO.	4 OF 4
		2015	- 001	- 00	

NARRATIVE

SAFETY SIGNIFICANCE

The event is of low safety significance due to the amount of times the valves were out of their required position and the low probability of an event occurring during this period that would require the RHR System. The WCGS Probabilistic Risk Assessment model only requires injection into one RCS cold leg. The 'B' RHR train was capable of injecting into two RCS cold legs.

OPERATING EXPERIENCE/PREVIOUS EVENTS

None.