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Serial: RNP-RA/13-0119

JAN 02 2014

10 CFR 50.73

Attn: Document Control Desk
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/RENEWED LICENSE NO. DPR-23

LICENSEE EVENT REPORT NO. 2013-002-00
AUTOMATIC ACTUATION OF AUXILIARY FEEDWATER SYSTEM DUE TO MAIN FEED
PUMP TRIP

Ladies and Gentlemen:

Pursuant to 10 CFR 50.73, Duke Energy Progress, Inc. is submitting the attached Licensee Event Report. There are no outstanding corrective actions required to restore compliance with NRC requirements; restoration of compliance has been met. Should you have any questions regarding this matter, please contact Mr. R. Hightower, Supervisor – Licensing/Regulatory Programs at (843) 857-1329.

This document contains no new Regulatory Commitments.

Sincerely,

W. R. Gideon
Site Vice President
H. B. Robinson Steam Electric Plant, Unit No. 2

WRG/jmw

Attachment

c: V. McCree, NRC, Region II
Siva Lingam, NRC, NRR
NRC Resident Inspector

TE22
NRR

US NRC Document Control Desk
Attachment to Serial: RNP-RA/13-0119
4 pages (including this cover page)

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT 2

LICENSEE EVENT REPORT NO. 2013-002-00

**AUTOMATIC ACTUATION OF AUXILIARY FEEDWATER SYSTEM DUE TO MAIN FEED PUMP
TRIP**

LICENSEE EVENT REPORT (LER)(See reverse 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 Service 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

H. B. Robinson Steam Electric Plant, Unit No. 2

2. DOCKET NUMBER

05000261

3. PAGE

1 OF 3

4. TITLE

Automatic Actuation of the Auxiliary Feedwater System Due to Main Feed Pump Trip

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
11	05	2013	2013	- 002	- 00	01	02	2013	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE

MODE 2

10. POWER LEVEL

000

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 checked="" 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 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**

R. Hightower, Manager Regulatory Affairs

TELEPHONE NUMBER (Include Area Code)

843-857-1329

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
	BA			N					

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)

At 0041 hours EST on 11/05/2013, with the Unit in Mode 2 and startup low-power physics testing in progress, there was an inadvertent automatic actuation of the Auxiliary Feedwater System [BA] due to an 'A' Main Feed Pump [SJ] trip. While placing the Condensate Polishers [KD] in service, a secondary-side perturbation occurred resulting in the loss of the running 'A' Main Feedwater Pump on low suction pressure coincident with low flow. There was no plant damage or personnel injury as a result of this event. An 8-hour, non-emergency notification was made to the NRC per 10 CFR 50.72(b)(3)(iv)(A) due to the valid actuation of the Auxiliary Feedwater System (EN# 49502).

The root cause evaluation has concluded that the cause of this event was an operating error by one individual involving procedure use and adherence.

Corrective actions consist of completion of confidential personnel actions for the Makeup Water Treatment/Condensate Polisher Auxiliary Operator responsible for the event, and enhancement of expectations for supervisory oversight of risk significant evolutions will be employed.

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

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
H. B. Robinson Steam Electric Plant, Unit No. 2	05000261	YEAR	SEQUENTIAL NUMBER	REV. NO.	2 OF 3
		2013	- 002	- 00	

NARRATIVE**PLANT IDENTIFICATION**

Westinghouse - Pressurized Water Reactor

EQUIPMENT IDENTIFICATION

Auxiliary Feedwater System [BA]; 'A' Main Feed Pump [SJ]; Condensate Polishers [KD]

IDENTIFICATION OF EVENT

At 0041 hours EST on 11/05/2013, with the Unit in Mode 2 and startup low-power physics testing in progress, there was an inadvertent automatic actuation of the Auxiliary Feedwater System due to an 'A' Main Feed Pump (MFP) trip. While placing the Condensate Polishers in service, a secondary-side perturbation occurred resulting in the loss of the running 'A' Main Feedwater Pump on low suction pressure coincident with low flow. There was no plant damage or personnel injury as a result of this event.

EVENT DATE

November 05, 2013

REPORT DATE

January 04, 2014

CONDITIONS PRIOR TO EVENT

MODE 2, 0% Power

DESCRIPTION OF EVENT

At 0041 hours EST on 11/05/2013, with the Unit in Mode 2 and startup low-power physics testing in progress, there was an inadvertent automatic actuation of the Auxiliary Feedwater System due to an 'A' Main Feedwater Pump (MFP) trip. While placing the Condensate Polishers in service, the Auxiliary Operator (AO) closed the primary Condensate Polisher bypass valve manually, which secured flow to the running 'A' MFP. The 'A' MFP then tripped on low suction pressure coincident with low flow. Both motor driven Auxiliary Feedwater Pumps started due to both MFP breakers being open simultaneously. The Control Room entered Abnormal Operating Procedure (AOP)-010, Main Feedwater/Condensate Malfunction, for loss of the MFP. Steam generator water levels were maintained by the auxiliary feedwater flow, and the Auxiliary Feedwater System remained in service pending investigation of the cause of the 'A' MFP trip. The 'B' motor-driven AFW pump was secured following its automatic start to stabilize steam generator water levels and Reactor Coolant System (RCS) temperature. The NRC Resident Inspector was notified, and the Control Room exited AOP-010. After successful restart of the 'A' MFP, the 'A' AFW pump was secured.

LICENSEE EVENT REPORT (LER) CONTINUATION SHEET

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		2013	- 002	- 00	

NARRATIVE

CAUSAL FACTORS

An investigation into the cause of the 'A' Main Feedwater Pump (MFP) trip identified that low suction pressure coincident with low flow resulting from manual manipulations of the Condensate Polishing System initiated the trip. This manipulation resulted in isolating main condensate flow to the only running feedwater pump.

The root cause investigation into the cause of this event determined that this was an individual operator error resulting from inadequate utilization of the procedure use and adherence process.

CORRECTIVE ACTIONS

Corrective action consisted of completion of confidential personnel actions for the Makeup Water Treatment/Condensate Polisher Auxiliary Operator responsible for the event, and enhancement of expectations for supervisory oversight of risk significant evolutions will be employed.

SAFETY ANALYSIS

The risk consequences of this event were minimal based on the successful auto-actuation of the Auxiliary Feedwater System (AFW) due to a Main Feed Pump (MFP) trip, and steam generator water levels were maintained by AFW. Although there was a very slight, measurable reactivity impact from the AFW actuation, no trip setpoints or pre-established manual trip setpoints were approached. The change in core reactivity was controlled using normal operating procedures. Therefore, there was no reactor trip. Additionally, there was no important accident mitigation equipment unavailable due to maintenance.