Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

August 22, 2011

10 CFR 50.73

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Sequoyah Nuclear Plant, Unit 2
Facility Operating License No. DPR-79
NRC Docket No. 50-328

Subject: **License Event Report 328/2011-001, "Nuclear Instrumentation System Power Range Neutron Flux Trip Low Range Bistable Incorrectly Calibrated"**

The enclosed licensee event report provides details concerning an event at the Sequoyah Nuclear Plant where a power range neutron flux low range trip instrumentation had been incorrectly calibrated during a refueling outage. The incorrect calibration and preparation for low power physics testing resulted in 2 of 4 instrument channels being inoperable during startup of the unit.

This report is being submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), as any operation or condition prohibited by the Technical Specifications. The cause of the event is still under investigation. A supplement to this event report is expected to be submitted by September 29, 2011.

There are no regulatory commitments contained in this letter. Should you have any questions concerning this submittal, please contact G. M. Cook, Sequoyah Site Licensing Manager, at (423) 843-7170.

Respectfully,

John T Carlin
Site Vice President
Sequoyah Nuclear Plant

Enclosure: Licensee Event Report - Nuclear Instrumentation System Power Range Neutron Flux Trip Low Range Bistable Incorrectly Calibrated

cc: Regional Administrator – Region II
NRC Senior Resident Inspector – Sequoyah Nuclear Plant

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NRC FORM 366 (10-2010) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/20

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 Section (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resources@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.

LICENSEE EVENT REPORT (LER)

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

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4. TITLE: Nuclear Instrumentation System Power Range Neutron Flux Trip Low Range Bistable Incorrectly Calibrated

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
06	22	2011	2011	- 001 -	00	08	22	2011	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE
2

10. POWER LEVEL
005

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

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☒ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☐ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER
  Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
Z. T. Kitts, Licensing Engineer	(423) 843-7018

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
A	JC	XIS	W120	N					

14. SUPPLEMENTAL REPORT EXPECTED

☒ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☐ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR
09	29	11

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

On June 23, 2011, at 0222 day light saving time (DST) Operations personnel entered into abnormal operating procedure for a malfunction of nuclear instrumentation during operation to increase reactor power above 25 percent. It was noted by Operations personnel that the power range nuclear instrumentation system (NIS) Channel N44 "Hi Flux Low Setpoint Bistable" indicating light was dark. Actions were taken to comply with technical specification (TS) limiting condition for operation (LCO) 3.3.1, "Reactor Trip System Instrumentation," Action 2, to place the inoperable channel in tripped condition. During an investigation following the event, it was determined that during the Unit 2 refueling outage, Maintenance personnel incorrectly performed a channel calibration on the Unit 2 power range NIS Channel N44. Following the refueling outage, NIS Channel N43 was made inoperable because it was connected to the plant reactivity computer for low power physics testing. Both the NIS Channel N43 and N44 were inoperable when Unit 2 entered into Mode 2 after the refueling outage. This resulted in a condition prohibited by TSs and is reportable, specifically limiting conditions of LCOs 3.0.4a, "Applicability," 3.3.1, and 3.10.3, "Physics Tests," were not met. The root cause evaluation of this event is ongoing. As a result, root and contributing cause(s) and action to prevent reoccurrence have not yet been established and will be provided in a supplement to this LER.

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NARRATIVE

I. PLANT CONDITION(S)

Unit 2 was in Mode 1 at greater than 25 percent of Rated Thermal Power (RTP) with approximate operating pressure at 2232 pounds per square inch gauge and temperature at 549 degrees Fahrenheit when the power range nuclear instrumentation system (NIS) [EIIS Code JC] channel N44 was discovered inoperable. Approximately 13 hours before entering into Mode 1, Unit 2 entered into Mode 2 with similar pressure and temperature conditions, at which time, the technical specification (TS) limiting conditions for operation (LCO) for 3.3.1, "Reactor Trip System Instrumentation," and LCO 3.0.4, "Applicability," were not met due to the inoperability of power range neutron flux instrumentation. Unit 2 was in Mode 6, when the power range nuclear instrumentation channel N44 was incorrectly calibrated.

II. DESCRIPTION OF EVENT

A. Event:

On June 23, 2011, at 0222 day light saving time (DST) Operations personnel entered into abnormal operating procedure for a malfunction of nuclear instrumentation during operation to increase reactor power above 25 percent. It was noted by Operations personnel that the power range NIS Channel N44 "Hi Flux Low Setpoint Bistable" indicating light was dark. Actions were taken to comply with LCO 3.3.1, Action 2, to place the inoperable channel in a tripped condition. During an investigation following the event, it was determined that during the Unit 2 refueling outage, on May 26, 2011, Maintenance personnel, one Tennessee Valley Authority (TVA) employee and one contractor, performed a channel calibration on the Unit 2 power range NIS Channel N44. Part of the calibration was to adjust the power range neutron flux high range bistable from the TS full power operation trip setpoint, 109 percent of RTP, to a lesser value trip setpoint of 60 percent of RTP for low power physics testing following the refueling outage. During this calibration, Maintenance personnel inadvertently adjusted the power range neutron flux low range bistable to 60 percent of RTP from the required TS nominal value of 25 percent RTP. Maintenance personnel also correctly adjusted the power range neutron flux high range bistable to the desired trip setpoint for low power physics testing. Following the completion of low power physics testing, the power range neutron flux high range bistables were calibrated for full power operation within TS limits.

TSs that are applicable for this event include: LCOs 3.0.3 and 3.0.4a, "Applicability," 3.3.1, and 3.10.3, "Physics Tests." Limitations and actions of this TSs include:

LCO 3.0.3 - Specifies in part, when LCO conditions are not met, within one hour take action to place the unit in a Mode in which the LCO does not apply or be in Hot Standby (i.e., Mode 3) within the next 6 hours.

LCO 3.0.4a - Specifies in part, when LCO conditions are not met, entering into a Mode or other specified condition shall only be made, if Actions permit continued operation in the Mode or condition for an unlimited period of time.

LCO 3.3.1 - Specifies in part, the minimum reactor trip system instrumentation channels to be Operable. The minimum number of Power Range Neutron Flux low range channels required to be operable is 3 of the 4 channels for Modes 1 and 2. When one of the four channels is inoperable, Action 2 allows for continued operation provided the inoperable channel, limited to 1 channel, be placed in tripped condition within 6 hours.

LCO 3.10.3 - Specifies in part, the limitations of various LCOs may be suspended during Mode 2 for physics tests provided, Thermal Power does not exceed 5 percent of RTP, setpoints of Operable Intermediate and Power Range NIS Channels are set at less or equal to 25 percent of RTP, and the Reactor Coolant System (RCS) [EIIS Code AB] lowest operating loop temperature is greater than or equal to 531 degrees Fahrenheit. Actions for exceeding 5 percent Rated Thermal Power and RCS temperature limits are provided. No action is provided for failure to have necessary NIS Channels Operable.

Safety Limits and Limiting Safety System Settings (LSSS), 2.2.1, "Reactor trip System Instrumentation Setpoints," specifics, in part, the setpoints for the reactor trip system instrumentation. LSSS 2.2.1, defines the Applicability for these setpoints to be in accordance with LCO 3.3.1. If a condition of LSSS 2.2.1 is not met, the associated Action in LCO 3.3.1 is taken. This specification is mentioned here because of the direct connection to LCO 3.3.1 and the NIS Channel N44 being not in compliance with the setpoint requirement.

The TVA is submitting this report in accordance with 10 CFR 50.73(a)(2)(i)(B), any operation or condition prohibited by the TSs.

B. Inoperable Structures, Components, or Systems that Contributed to the Event:

NIS Channel N43 was inoperable because it was connected to the plant reactivity computer for low power physics testing. This channel was in a tripped condition in accordance with TS LCO 3.3.1, Action 2. In the tripped condition, one half of the 2 out of 4 logic was complete for a reactor trip.

NIS Channel N44 was inoperable due to the power range neutron flux low range bistable being incorrectly calibrated.

C. Dates and Approximate Times of Major Occurrences:

May 26, 2011 at approximately 1130 DST	With Unit 2 in Mode 6 following reactor shutdown for scheduled maintenance, Maintenance personnel are authorized to perform calibration on the NIS Channel N44.

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	Maintenance personnel inadvertently calibrated the NIS N44 Power Range Neutron Flux Low Range Bistable setpoint.
June 2, 2011	Surveillance package for calibration of NIS Channel N44 acceptance criteria was reviewed and found satisfactory.
June 21, 2011 at 1230 DST	With Unit 2 in Mode 3, NIS Channel N43 was removed from service and placed in tripped condition to comply with LCO 3.3.1, Action 2, for setup of the plant reactivity computer for low power physics testing.
June 22, 2011 at 0411 DST	Unit 2 enters Mode 2. LCO 3.0.4a is applied for Mode 2 operation for known inoperable equipment: Penetration X-19 for post accident sampling line valves [EIIS Code IP] and NIS Channel N43. However, compliance with LCO 3.3.1 was not met, because Operation personnel were unaware of the inoperable NIS Channel N44 due to the incorrect setpoint of the power range neutron low range bistable. LCO 3.0.3 applies at this time with both NIS Channels N43 and N44 inoperable since LCO 3.3.1, Action 2, does not provide actions for more than one inoperable channel. LCO 3.0.4a would not be met at this time, because LCO 3.0.3 does not permit continued operation in the Mode 2.
June 22, 2011 at 0411 DST	LCO Actions are complied with for known inoperable equipment under LCO 3.6.3, "Containment Isolation Valves" and LCO 3.3.1 for entering into Mode 2.
June 22, 2011 at 0502 DST	Low power physics testing commences. LCO 3.10.3 is entered. Because Operations personnel were unaware that NIS Channel N44 was inoperable and with NIS Channel N43 inoperable, compliance with LCO 3.10.3 was not met. LCO 3.0.3 would have been required to be entered, because LCO 3.10.3 does not provide an Action for failure to meet the LCO.
June 22, 2011 at 1111 DST	Compliance with LCO 3.0.3 is not met for failure to be in Hot Standby, for inoperable NIS Channels N43 and N44.
June 22, 2011 at 1323 DST	Low power physics testing is complete and LCO 3.10.3 is no longer invoked.
June 22, 2011 at 1453 DST	LCO 3.3.1, Action 2, for NIS Channel N43 is exited with the channel restored to operable status. LCO 3.0.3 would not have applied because only one channel (i.e., NIS Channel N44) was inoperable.
June 22, 2011 at 1729 DST	Unit 2 enters Mode 1

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June 23, 2011 at 0222 DST	Operations personnel enter abnormal operating procedures for nuclear instrument malfunction due to NIS Channel N44 indicating light failure with RTP greater than 25 percent. Upon discovery, LCO 3.3.1, Action 2, is entered to place NIS Channel N44 in tripped condition.
June 23, 2011 at 0355 DST	LCO 3.3.1, Action 2, to place inoperable NIS Channel N44 in tripped condition is complete.
June 23, 2011 at 1830 DST	NIS Channel N44 is returned to operable status following maintenance and LCO 3.3.1, Action 2, is exited.
June 29, 2011	Investigation of the power range high neutron flux low range bistable card determined the card had not failed, but had been calibrated incorrectly.

D. Other Systems or Secondary Functions Affected:

No other systems or secondary function were affected.

E. Method of Discovery:

On June 23, 2011, at 0222 DST, during power ascension above 25 percent RTP, Operations personnel discovered that the NIS Channel N44 indicating light was "dark" and declared the channel inoperable.

F. Operator Actions:

Following the discovery, Operations personnel entered into an abnormal operating procedure for the inoperable nuclear instrumentation and complied with TSs actions for the associated inoperable equipment.

G. Safety System Responses:

No safety system response was required.

III. CAUSE OF THE EVENT

A. Immediate Cause:

The immediate cause of the event was incorrect setting of the NIS Channel N44 for the power range neutron flux low range setpoint.

B. Root Cause:

The root cause for this event is still under investigation. When the final investigation is completed, this report will be updated.

C. Contributing Factor:

Contributing factor(s) for this event is still under investigation. When the final investigation is completed, this report will be updated.

IV. ANALYSIS OF THE EVENT

The NIS power range neutron flux trip circuit trips the reactor when two of the four power range channels exceed the trip setpoint (i.e., two out of four logic). There are two independent bistables each with their own trip setting (a high and a low setting) per channel (four channels total). TS LSSS 2.2.1 indicates that the reactor trip nominal setpoints for the power range high neutron flux low range and the high range is 25 percent and 109 percent of RTP, respectively. The NIS Channel N44 low and high range settings had been calibrated to 60 percent of RTP. NIS Channels N41 and N42 were operable with low range setting within the TSs limits of 25 percent of RTP and the high range setting calibrated to 60 percent of RTP as intended to support low power physics testing. NIS Channel N43 was in tripped condition, providing one half the logic for a reactor trip, with this channel aligned to the reactivity computer.

The NIS power range neutron flux protection function provides reactor protection for events that result in an increase in reactor power as measured by an increase in neutron flux external to the reactor vessel. This function is, in part, credited for mitigation of the uncontrolled rod cluster control assembly (RCCA) bank [EIIS Code AA] withdrawal from a subcritical condition and withdrawal at power; excessive heat removal due to feedwater system [EIIS Code SJ] malfunctions; rupture of a control rod drive mechanism housing (i.e., RCCA Ejection); excessive load increase; accidental depressurization of the Main Steam System [EIIS Code SB]. Each of these events is discussed below. An assessment of the safety consequences and implication regarding low power physics testing is also considered.

An RCCA withdrawal accident is defined as an uncontrolled addition of reactivity to the reactor core caused by withdrawal of rod cluster control assemblies resulting in a power excursion. Such a transient could be caused by a malfunction of the reactor control or control rod drive systems. This could occur with the reactor either subcritical, at hot zero power or at power. The neutron flux response to a continuous reactivity insertion is characterized by a very fast rise attenuated by the reactivity feedback effect of the negative Doppler coefficient. The limiting transient for "at power" is analyzed to occur at full RTP with the power range neutron flux high range trip conservatively assumed to be 118 percent of RTP. Any rod withdrawal at power would have remained within the analyzed conditions since it would have been mitigated by the trip (i.e., 2 out of 4 logic to complete) provided by the power range neutron flux high range trip of NIS Channel N41,

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N42, or N44, as these were set to 60 percent of RTP. For the RCCA withdrawal from a subcritical and at zero power, the Updated Final Safety Analysis Report (UFSAR) assumes the power range neutron flux low range trip function is credited for initiating the reactor trip signal. The result of the analysis for subcritical and at zero power indicates nuclear power overshoots the RTP for a short time period with fuel thermal response lagging and remaining below RTP. As a result, departure from nucleate boiling (DNB) is maintained within limit. Given that the design of the power range high neutron flux instrumentation meets single-failure criteria, with one of 4 channels failed (i.e., NIS Channel N44,) and the NIS Channel N43 in tripped or operable condition, the 2 other operable channels, N41 and N42, were available to complete the logic for a reactor trip signal.

Excessive heat removal due to feedwater system malfunctions are means of increasing core power above full power. These malfunctions may occur as a result of reductions in feedwater temperature or additions of excessive feedwater. Either malfunction may be caused by equipment failure or an operator error. With the plant at no-load conditions, the addition of cold feedwater may cause a decrease in RCS temperature and thus a reactivity insertion due to the effects of the negative moderator coefficient of reactivity. For the cases of an accidental full opening of one or more feedwater control valves with the reactor at zero power it has been determined in the UFSAR, the maximum reactivity insertion rate is less than the maximum reactivity insertion rate analyzed in the uncontrolled RCCA withdrawal from a subcritical condition discussed previously. It is noted in the UFSAR, that if this event occurs with the unit just critical at no load, the power range neutron flux low range trip may mitigate this event. As discussed, the design of the power range neutron flux instrumentation meets single-failure criteria, such that with one of 4 channels failed (i.e., NIS Channel N44) and the NIS Channel N43 in tripped or operable condition, the 2 other operable channels, N41 and N42, were available to complete the logic for a reactor trip signal.

In the case of continuous addition of excessive feedwater, the event is mitigated by the steam generator high-high level trip, which closes all feedwater regulator isolation valves, trips main feedwater pumps and trips the turbine.

The ejected RCCA event is initiated by an assumed mechanical failure of the control rod mechanism pressure housing which results in a rapid reactivity insertion. The responses are rapid with the power spike occurring over a small fraction of a second. The transient, as analyzed, is mitigated by the power range neutron flux low range trip (i.e., for hot zero power) and the power range neutron flux high range trip (i.e., for full power.) As previously discussed, the power range neutron flux instrumentation meets single-failure criteria, such that with one of 4 channels failed (i.e., NIS Channel N44) and the NIS Channel N43 in tripped or operable condition, the 2 other operable channels, N41 and N42, were available to complete the logic for a reactor trip signal. As such, the analysis of the ejected rod event is not affected by the instrument channel condition as described in this LER.

An excessive load increase incident is defined as a rapid increase in the steam flow that causes a power mismatch between the reactor core power and the steam generator load demand. Protection against an excessive load increase accident is provided by the power range high neutron flux trip, overpower delta T trip and overtemperature delta T trip. The UFSAR evaluates these accidents without crediting a reactor trip and demonstrates that reactivity feedback limits power and prevents DNB from occurring.

The most severe core conditions resulting from an accidental depressurization of the main steam system are associated with an inadvertent opening of a single steam dump, relief or safety valve. The steam release as a consequence of this accident results in an initial increase in steam flow which decreases during the accident as the steam pressure falls. The energy removal from the RCS causes a reduction of coolant temperature and pressure. The analysis is performed to demonstrate that the following criterion is satisfied: Assuming a stuck rod cluster control assembly and a single failure in the Engineered Safety Features the DNB design basis will be met after reactor trip. Should the reactor be just critical or operating at power at the time of a steam release, the reactor is protected by the power range high neutron flux trip, overpower delta T trip and overtemperature delta T trip. As discussed previously, the design of the power range high neutron flux instrumentation meets single-failure criteria, such that with one of 4 channels failed (i.e., NIS Channel N44) and the NIS Channel N43 in tripped or operable condition, the 2 other operable channels, N41 and N42, were available to complete the logic for a reactor trip signal. As such, the event would be mitigated and the minimum DNB ratio remains above the limiting value, no consequential damage to the core or reactor system occurs.

During a portion of this event, low power physics testing was in progress to ensure that the operating characteristics of the core are consistent with the design predictions and that the core can be operated as designed. Although these Physics Tests are generally accomplished within the limits for all LCOs, conditions may occur when one or more LCOs must be suspended to make completion of Physics Tests possible or practical. This is acceptable as long as the fuel design criteria are not violated. When one or more of the requirements specified in LCO 3.1.1.3, "Moderator Temperature Coefficient," LCO 3.1.1.4, "Minimum Temperature for Criticality," LCO 3.1.3.1, "Movable Control Assemblies," LCO 3.1.3.5, "Shutdown Rod Insertion Limit," and LCO 3.1.3.6, "Control Rod Insertion Limits," are suspended for Physics Tests, the fuel design criteria are preserved as long as the thermal power does not exceed 5 percent of RTP and RCS lowest operating loop temperature is greater than or equal to 531 degrees Fahrenheit. During the nearly 13 hours of testing, the conditions for limitation suspension of the above LCOs were met, except for the unknown inoperable NIS Channel N44. During the physics testing, LCOs not met as allowed by LCO 3.10.3 included LCO 3.1.3.5 and LCO 3.1.3.6, when shutdown and control rods were inserted beyond the insertion limit specified in the Core Operating Limits Report. As in the other UFSAR analyzed event, this event would be mitigated by the reactor protection system [EIIS Code JC]. The

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condition of NIS Channel N44, during low power physics testing, would not have prevented a reactor trip, as the design of the power range high neutron flux instrumentation meets single-failure criteria, such that with one of 4 channels failed (i.e., NIS Channel N44) and the NIS Channel N43 in tripped condition, the 2 other operable channels, N41 and N42, were available to complete the logic for a reactor trip signal.

V. ASSESSMENT OF SAFETY CONSEQUENCES

Based on the above "Analysis of The Event," this event did not adversely affect the health and safety of plant personnel or the general public.

VI. CORRECTIVE ACTIONS

A. Immediate Corrective Actions:

Operations personnel entered into TS LCO 3.3.1, Action 2, for the inoperable power range neutron flux instrumentation channel. The affected NIS channel card was identified and replaced and the channel was calibrated to meet TS limits.

B. Corrective Actions to Prevent Recurrence:

The root cause for this event is still under investigation. When the final investigation is completed, this report will be updated.

VII. ADDITIONAL INFORMATION

A. Failed Components:

The failed component, as a result of an incorrect calibration, was the Power Range High Neutron Flux bistable circuit card used for the low range trip setpoint. The card is manufactured by Westinghouse Electrical Company and is model number 3359C39G01.

B. Previous LERs on Similar Events:

A review of previous reportable events for the past 3 years did not identify any previous similar events.

C. Additional Information:

Human performance cause and circumstances for this event are still under investigation. When the final investigation is completed, this report will be updated. Contributing factors discussed in this LER are being addressed within the Corrective Action Program under Problem Evaluation Report number 397142.

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D. Safety System Functional Failure:

This event did not result in a safety system functional failure in accordance with 10 CFR 50.73(a)(2)(v).

E. Unplanned Scram with Complications:

This event did not result in a scram of Unit 2.

VIII. COMMITMENTS

None.