



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

August 7, 2015

Mr. Bryan C. Hanson
Senior VP, Exelon Generation Company, LLC
President and CNO, Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

**SUBJECT: DRESDEN NUCLEAR POWER STATION, UNIT 2 - NRC SUPPLEMENTAL
INSPECTION REPORT 05000237/2015009 AND ASSESSMENT FOLLOW-UP
LETTER**

Dear Mr. Hanson:

On April 21, 2015, your staff reported an Unplanned Scrams per 7000 Critical Hours performance indicator that crossed a threshold from Green to White for Unit 2. Based on your report, the U.S. Nuclear Regulatory Commission (NRC) assigned a White performance indicator Action Matrix input to the Initiating Events cornerstone in the first quarter of 2015.

In response to this Action Matrix input, the NRC informed you that a supplemental inspection under Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," would be required.

On June 9, 2015, you informed the NRC that Dresden, Unit 2, was ready for the supplemental inspection.

On June 26, 2015, the NRC completed the supplemental inspection and discussed the results of this inspection and the implementation of your corrective actions with Mr. S. Marik, and other members of your staff. This exit meeting also served as a Regulatory Performance Meeting. The inspector documented the results of this inspection in the enclosed inspection report.

The NRC performed this supplemental inspection to determine whether: (1) the root and contributing causes for the significant issues were understood; (2) the extent of condition and extent of cause for the identified issues were understood; and (3) your completed or planned corrective actions were sufficient to address and prevent repetition of the root and contributing causes.

The NRC determined that your staff's evaluations identified primary root causes for each of the four reactor scram events. Specifically, insulation flaws during manufacturing of the main power transformer (scram date April 12, 2014); insufficient validation of vendor documents (procedures and drawings) during upgrade of the automatic voltage regulator (scram date May 3, 2014); improperly landed leads in the feedwater level control system (FWLC) (scram date January 13, 2015); and improperly landed leads in the FWLC and less than rigorous challenge of troubleshooting results (scram date February 6, 2015). No overarching root cause was identified by the licensee for the summation of the events, but a contributing cause of "lack of troubleshooting process adherence" was identified.

B. Hanson

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The NRC determined that the programs and processes at Dresden Nuclear Power Station generally met the Commission's rules and regulations. The NRC has determined that completed or planned corrective actions are sufficient to address the performance that led to the White performance indicator. In addition, based on data submitted by Dresden for the second quarter of 2015, the Unplanned Scrams per 7000 Critical Hours performance indicator returned to Green as of April 1, 2015. Therefore, the performance issue will not be considered as an Action Matrix input after the end of the first quarter of 2015. With the issuance of the attached inspection report and this performance assessment follow-up letter, the NRC determined the performance at Dresden Nuclear Power Station, Unit 2, to be in the Licensee Response Column of the Reactor Oversight Process Action Matrix as of August 7, 2015.

Based on the results of this inspection, the NRC inspectors did not identify any findings or violations of more than minor significance. A finding of very-low safety significance (Green) was documented in NRC Inspection Report 05000237;05000249/2015002 for the licensee's failure to follow work instructions when installing the FWLC system which resulted in the January 13, 2015, and February 6, 2015, scram events.

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Jamnes Cameron, Chief
Branch 4
Division of Reactor Projects

Docket No. 50-237
License No. DPR-19

Enclosure:
IR 05000237/2015009
w/Attachment: Supplemental Information

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-237
License No: DPR-19

Report No: IR 05000237/2015009

Licensee: Exelon Generation Company, LLC

Facility: Dresden Nuclear Power Station, Unit 2

Location: Morris, IL

Dates: June 22 – 26, 2015

Inspectors: G. Roach, Senior Resident Inspector

Approved by: J. Cameron, Chief
Projects Branch 4
Division of Reactor Projects

Enclosure

SUMMARY

Inspection Report (IR) 05000237/2015009; 06/22/2015 – 06/26/2015; Dresden Nuclear Power Station, Unit 2; Supplemental Inspection - Inspection Procedure (IP) 95001.

A senior resident inspector performed this inspection. No findings were identified during this inspection. The U.S. Nuclear Regulatory Commission's (NRC's) program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process."

Cornerstone: Initiating Events

The NRC staff performed this supplemental inspection in accordance with IP 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," to assess the licensee's evaluation associated with four reactor scram events that took place on Unit 2 between April 2014 and February 2015. During this supplemental inspection, the inspector determined that the licensee performed a comprehensive evaluation of the self-revealed failures which were described in NRC IR 05000237;05000249/2014003 and IR 05000237;05000249/2015002. The licensee identified primary root causes for each of the four reactor scram events. Specifically, insulation flaws during manufacturing of the main power transformer (scram date April 12, 2014); insufficient validation of vendor documents (procedures and drawings) during upgrade of the automatic voltage regulator (scram date May 3, 2014); improperly landed leads in the feedwater level control system (FWLC) (scram date January 13, 2015); and improperly landed leads in the FWLC and less than rigorous challenge of troubleshooting results (scram date February 6, 2015). No overarching root cause was identified by the licensee for the summation of the events, but a contributing cause of "lack of troubleshooting process adherence" was identified.

Given the licensee's acceptable performance in addressing the deficiencies which led to the four reactor scrams on Unit 2, and the number of unplanned scrams per 7000 critical hours returning to a value below the threshold for White performance, the White performance indicator will only be considered in assessing plant performance for the first quarter of 2015 in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program." Inspectors will review the licensee's implementation of ongoing corrective actions and the effectiveness of those actions during a future inspection.

REPORT DETAILS

4. OTHER ACTIVITIES

40A4 Supplemental Inspection (95001)

.01 Inspection Scope

This inspection was conducted in accordance with Inspection Procedure (IP) 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," to assess the licensee's evaluation of one White performance indicator in the Initiating Events Cornerstone. The inspection objectives were to provide assurance that:

- the root causes and contributing causes of risk significant performance issues were understood;
- the extent of condition and extent of cause of risk significant issues were identified; and
- licensee corrective actions to risk significant performance issues were or will be sufficient to address the root causes and contributing causes, and to prevent recurrence.

Dresden Nuclear Power Station, Unit 2, entered the Regulatory Response column of U.S. Nuclear Regulatory Commission's (NRC's) Action Matrix in the first quarter of 2015 as a result of exceeding the White threshold for the Unplanned Scrams per 7000 Critical Hours performance indicator. Dresden Nuclear Power Station, Unit 2, experienced reactor scrams on April 12, 2014, May 3, 2014, January 13, 2015, and February 6, 2015. The April 12, 2014, scram was associated with a failed main power transformer high voltage winding. The May 3, 2014, scram was a result of a failed fuse in the controlling channel of the main generator voltage regulator. The January 13, 2015, and February 6, 2015 scrams occurred due to improperly landed leads in a feedwater level control system (FWLC) power supply.

By letter dated June 9, 2015, the licensee notified the NRC that it had completed its evaluation of the circumstances surrounding the performance deficiency and was ready for the NRC to assess the licensee's evaluation and subsequent corrective actions. The licensee's preparation for the inspection consisted of the development of four root cause reports under Issue Reports (IR) 1646633, "Main Power Transformer Failure Due to an Independent Cause," IR 1655458, "Dresden D2F54 Mid-Cycle Forced Outage Due to Automatic Voltage Regulator Failure," IR 2437067, "Two Reactor Scrams from a FWLC Failure with a Reactor Recirculation Pump Runback," and IR 2480399, "Dresden Exceeded Threshold for Initiating Events – White Performance Indicator." The licensee also conducted a focused self-assessment under IR 2495346, "Readiness Assessment – Supplemental Inspection for NRC WHITE ROP PI," to review the adequacy of the developed root cause reports. The inspector reviewed the root cause reports, the focused self-assessment report, and other documents related to the root cause-identified issues.

The inspector reviewed corrective actions that were taken or planned to address the identified causes. The inspector also held discussions with licensee personnel to ensure that the root and contributing causes, and the contribution of safety culture components were understood and corrective actions taken or planned were appropriate to address the causes and preclude repetition. Documents reviewed are listed in the Attachment to this report.

.02 Evaluation of the Inspection Requirements

02.01 Problem Identification

- a. Determine whether the evaluation identified who (i.e., licensee, self revealing, or NRC), and under what conditions the issue was identified.

The inspector determined that the root cause evaluations (RCEs) adequately identified who and under what conditions the issues were identified. The RCEs concluded that each individual event was self-revealed.

- b. Determine whether the evaluations documented how long the issue existed, and whether there were any prior opportunities for identification.

The inspector determined that the four evaluations properly documented how long each issue existed. IR 1646633 identified that main power transformer was in operation for 4.5 years prior to failure, and that no negative parameter trends or indications of internal arcing existed prior to its failure on April 12, 2014. Inspection of the transformer internals indicated that the cause of the fault was most probably associated with defects in the insulating material on the high voltage windings, which was set in place during initial construction of the transformer.

IR 1655458 identified that indications and alarms first existed of a failed fuse in the circuitry of controlling channel 2 of the Unit 2 Digital Automatic Voltage Regulator (DAVR) on April 29, 2014. The unit suffered a load rejection and subsequent reactor scram on May 3, 2014, during activities to force a swap to channel 1 for DAVR control.

IR 2437067 identified that alarms for Unit 2 FWLC trouble indicating backup controlling channel failure were first experienced in January 2006, and then subsequently in September 2014, October 2014, and following the first FWLC failure and associated reactor scram in January 2015. In addition, the evaluation noted that the root cause of the FWLC failures and subsequent reactor scrams on January 13, 2015, and February 6, 2015 was due to improperly landed leads in a FWLC power supply. The leads had not been adjusted since initial installation of the system in 1997.

- c. Determine whether the licensee's RCEs documented the plant specific risk consequences and compliance concerns associated with the issue.

The RCEs included a discussion of nuclear, radiological and environmental safety significance and stated that the licensee's risk assessment showed the issues as having very low safety significance (Green) as no safety related equipment was adversely affected or challenged by failures of the main power transformer, DAVR, and FWLC. The inspectors concluded that the licensee's RCEs documented the risk consequences and compliance concerns associated with the issues.

- d. Findings

No findings were identified.

02.02 Root Cause, Extent of Condition, and Extent of Cause Evaluation

- a. Determine whether the licensee's RCE applied systematic methods in evaluating the issue in order to identify root causes and contributing causes.

The inspector determined that the RCEs adequately applied systematic methods in evaluating the issues in order to identify root causes and contributing causes. The licensee's RCEs utilized Cause and Effect Analysis, Latent Organizational Weakness Evaluation (non-equipment), Causal Factor Analysis, Review of Operating Experience, Barrier Analysis, Failure Modes and Effects Analysis, Support/Refute Matrices, and Event Timeline Development to analyze various contributors to the issues associated with the four reactor scrams. The inspector determined that the licensee used adequate methods to evaluate the root and contributing causes of the events.

- b. Determine whether the licensee's RCE was conducted to a level of detail commensurate with the significance of the problem.

The inspector determined that the RCEs were conducted to a level of detail commensurate with the significance of each of the events. The licensee RCEs determined root and contributing causes for each event. No overarching root cause was identified for the Unplanned Scrams per 7000 Critical Hours performance indicator exceeding the White threshold, but a contributing cause of "lack of troubleshooting process adherence" was identified.

- c. Determine whether the licensee's RCE included consideration of prior occurrences of the problem and knowledge of prior operating experience.

In its RCE, the licensee included an evaluation of internal and external Operating Experience (OE). While the licensee did not identify specific similar prior issues at Dresden, the RCE reviewed operating experience at other reactor sites and documented whether the specific item had elements applicable to Dresden and how those elements, if applicable, were or are addressed. Based on a review and assessment of the licensee's evaluation, the inspector determined that the RCEs included a consideration of prior occurrences of the problem and knowledge of prior OE.

- d. Determine that the RCE addressed the extent of condition and the extent of cause of the problem.

The RCEs addressed the extent of condition and extent of cause of the issues.

For the extent of condition reviews, the licensee looked at the performance of similar make and model transformers used throughout its fleet in RCE IR 1646633; the performance, design, and controlling procedures of similar make and model DAVR throughout its fleet in RCE IR 1655458; and Unit 3 FWLC electrical connections as well as other digital systems which incorporate spade-lug power supply connections in RCE IR 2437067.

Licensee extent of cause reviews included making revisions to procedures and bid specifications to ensure critical physical inspections during large transformer manufacturing are specified in hold points and that inspectors are required to be physically present in RCE IR 1646633; a review of acceptance testing and design of all major equipment upgrades including digital electrohydraulic control, adjustable speed

drive, main power transformer replacements, generator rewinds, exciter replacements, condensate filtration system addition, and turbine supervisory instrumentation in RCE IR 1655458; and a review of formal complex troubleshooting plans and support and refute matrices utilized over the past year as well as an ongoing review for potential deficient trends in the troubleshooting process through March 2016 in RCE IR 2437067.

- e. Determine that the licensee's root cause, extent of condition, and extent of cause evaluations appropriately considered the safety culture components as described in Inspection Manual Chapter (IMC) 0305.

The licensee conducted safety culture reviews in accordance with PI-AA-125-1006, "Investigation Techniques Manual," Attachment 17. Licensee safety culture reviews evaluated the 13 safety culture components in NRC Regulatory Issues Summary 2006-13, and as described in IMC 0310, "Components Within the Cross-Cutting Areas." The root cause teams appropriately identified station performance gaps with respect to aspects of human performance, conservative bias in decision making, resources, and training during its review. The licensee developed corrective actions commensurate to the identified performance gaps to prevent recurrence.

Overall, the inspectors determined that the licensee's RCEs included proper consideration of whether the root cause, extent of condition, and extent of cause evaluations appropriately considered the safety culture components.

- f. Findings

No findings were identified.

02.03 Corrective Actions

- a. Determine that appropriate corrective actions are specified for each root and contributing cause or that the licensee has an adequate evaluation for why no corrective actions are necessary.

A corrective action to prevent recurrence (CAPR) of replacing the Unit 2 main power transformer with a different design which was fabricated by a different manufacturer in addition to a corrective action to make changes to procedures governing third party observations of the large transformer manufacturing process was implemented by the licensee in order to address the Unit 2 scram, which resulted from the main power transformer failure. The licensee determined the root cause to be "indeterminate" with a most probable root cause of "a combination of insulation issues that appear to be from the manufacturing process."

The licensee implemented a CAPR modifying HU-AA-1212, "Technical Task Risk/Rigor Assessment, Pre-Job Brief, Independent Third Party Review, and Post-Job Review," to include mitigating strategies for incorporating and troubleshooting new designs, which include digital technologies, new to industry technology, and designs that rely on significant vendor support as well as supporting corrective actions to include corrected vendor procedures for DAVR channel transfers into licensee procedures to address the Unit 2 scram, which resulted from a failure of the DAVR. The licensee determined the root cause of this event to be "insufficient validation of vendor products following major equipment upgrades to ensure reliability of the newly installed equipment," with

contributing causes of “insufficient risk factor assessment for designs which are highly reliant on vendor expertise or vendor provided complex digital technology; the ABB Unitrol 6000 Dresden U2 Channel transfer procedure being inadequate; ABB not designing the AVR to meet all design requirement; and less than adequate ABB developed AVR Factory Acceptance Test and Site Acceptance Test.”

A CAPR replacing the improperly landed ribbon cable with individual wires in the FWLC power supply circuitry was established to address the licensee identified root cause of “improperly landed power supply ribbon cable,” which was associated with both reactor scrams initiated by failures in the FLWC. In addition, several corrective actions were created by the licensee to address the root cause specifically associated with the second FWLC failure of “less than rigorous organizational challenge of troubleshooting.” The corrective actions included developing a case study of the event, creating training for various working groups on the complex troubleshooting process, increasing management oversight of troubleshooting, and performing a 100 percent review of open support/refute matrices and complex troubleshooting documents.

The inspector interviewed an engineering manager to determine the licensee’s intentions for completing the 100 percent review of the support/refute matrices and complex troubleshooting documents. Based on the outcome of this interview, the inspector determined that the licensee is performing a management review of all active support/review matrices and a monthly review of all complex troubleshooting packages. In March 2016 the licensee will perform a trend review to look at all identified deficiencies during these reviews and develop training to address deficient trends.

- b. Determine whether the licensee prioritized the corrective actions with consideration of the risk significance and regulatory compliance.

The inspector determined that the licensee adequately prioritized the corrective actions with consideration of the risk significance and regulatory compliance. The licensee took immediate corrective actions to replace the failed main power transformer, repair the failed fuse in the DAVR controlling channel, and replace the improperly landed ribbon cable with individual wires in the FWLC power supply. Other specified corrective actions were associated with long term culture reinforcement or enhancements to procedures or processes. The inspector concluded that the corrective actions had been prioritized with consideration of the risk significance and regulatory compliance.

- c. Determine whether the licensee established a schedule for implementing and completing the corrective actions.

The inspector determined that the licensee adequately established a schedule for implementing and completing corrective actions. The remaining major corrective actions, as determined by the inspector, are:

- Improve the formality and rigorous use of the troubleshooting process through the use of training supervisors and duty team members – scheduled completion 7/30/2015 – RCE IR 2437067 assignment number 36.
- Present the Case Study from the FWLC Scram RCE – scheduled completion 7/30/2015 – RCE IR 2437067 assignment number 68.

- Improve the formality and rigorous use of the troubleshooting process through senior manager observation of troubleshooting activities and HU-AA-1212 pre-job briefs – scheduled completion 9/30/2015 – RCE IR 2437067 assignment number 37.
- Perform a review of 100 percent of the open support/refute matrices and complex troubleshooting documents – scheduled completion 3/1/2016 – RCE IR 2437067 assignment number 42.

The corrective actions and the scheduled completion dates are as listed in RCE IR 2437067 as of the date of the NRC exit.

- d. Determine that quantitative or qualitative measures of success have been developed for determining the effectiveness of the corrective actions to prevent recurrence.

The inspector determined that the licensee established a requirement to perform an effectiveness review for the corrective action associated with inspections of large transformers during the manufacturing process in support of RCE IR 1646633 due in January 2017. In addition, an effectiveness review was scheduled for February 2017 with regards to the CAPR of making modifications to the HU-AA-1212, “Technical Task Risk/Rigor Assessment, Pre-Job Brief, Independent Third Party Review, and Post-Job Review” to include mitigating strategies for incorporating and troubleshooting new designs which include digital technologies, new to industry technology, and designs that rely on significant vendor support as well as supporting corrective actions in support of RCE IR 1655458. Lastly, an effectiveness review is scheduled for March 2016 for the numerous corrective actions associated with improving the complex troubleshooting process in support of RCE IR 2437067.

- e. Determine that the licensee’s planned or taken corrective actions adequately address the Notice of Violation (NOV) that was the basis for the supplemental inspection, if applicable.

The NRC staff did not issue an NOV to the licensee; therefore, this inspection requirement was not applicable.

- f. Findings

No findings were identified.

02.04 Evaluation of IMC 0305 Criteria for Treatment of Old Design Issues

The inspectors determined this issue did not meet the IMC 0305 criteria for treatment as an old design issue.

4OA6 Exit Meeting

.1 Exit Meeting Summary

On June 26, 2015, the inspector presented the inspection results to Mr. S. Marik, and other members of his staff. The inspector asked the licensee if any of the material examined during the inspection should be considered proprietary. The licensee did not identify any proprietary information.

.2 Regulatory Performance Meeting

During the June 26, 2015 exit meeting, the NRC discussed with the licensee its performance at Dresden in accordance with IMC 0305, Section 10.01.a. The meeting was attended by the Region III Division of Reactor Projects, Projects Branch 4, Branch Chief, NRC resident inspectors, the Dresden Site Vice President, and other senior licensee staff. During this meeting, the NRC and licensee discussed the issues related to the White performance indicator for unplanned scrams that resulted in Dresden being placed in the Regulatory Response Column of the Action Matrix. This discussion included the causes, corrective actions, extent of condition and extent of cause for the issues identified as a result of the individual scram events.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

S. Marik, Site Vice President
J. Washko, Plant Manager
L. Antos, Security Manager
B. Franzen, Regulatory Assurance Manager
G. Graff, Nuclear Oversight Manager
F. Gogliotti, Engineering Director
B. Kapellas, Maintenance Director
G. Morrow, Operations Director
P. O'Brien, Corrective Action Program Manager
M. Overstreet, Radiation Protection Manager
A. Pullam, Training Director
J. Quinn, Work Control Director
R. Schmidt, Chemistry Manager
D. Walker, Regulatory Assurance – NRC Coordinator

U.S. Nuclear Regulatory Commission

J. Cameron, Chief, Branch 4, Division of Reactor Projects

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

None

Closed

IE01	PI	Unplanned Scrams per 7000 Critical Hours Initiating Events Performance Indicator
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LIST OF ACRONYMS USED

ABB	ASEA Brown Boveri
ADAMS	Agencywide Document Access Management System
CAPR	Corrective Action to Prevent Recurrence
CFR	Code of Federal Regulations
DAVR	Digital Automatic Voltage Regulator
DRP	Division of Reactor Projects
FWLC	Feedwater Level Control
IMC	Inspection Management Chapter
IP	Inspection Procedure
IR	Inspection Report
NOV	Notice of Violation
NRC	U.S. Nuclear Regulatory Commission
OE	Operating Experience
PARS	Publicly Available Records System
RCE	Root Cause Evaluation

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

PLANT PROCEDURES

<u>Number</u>	<u>Description or Title</u>	<u>Revision</u>
AD-AA-3000	Nuclear Risk Management Process	1
HU-AA-1212	Technical Task Risk/Rigor Assessment, Pre-Job Brief, Independent Third Party Review, and Post-Job Review	6
MA-AA-716-004	Conduct of Troubleshooting	12
MA-DR-773-734	Abnormal operations transfer Procedure	0

CORRECTIVE ACTION DOCUMENTS REVIEWED

<u>Number</u>	<u>Description or Title</u>	<u>Date</u>
IR 1646633	U2 Reactor Scram	04/12/2014
IR 1655458	U2 Reactor Scram	05/03/2014
IR 1655458-32	Track to completion a revision to HU-AA-1212 CAPR 1655458-32 to Robles-Decker, Plant Engineering Main Generator System Manager to review RCR 1655458-09 Section titled Design Change Identification and Management of Risks. Track to completion a revision to HU-AA-1212, titled Technical Task Risk/Rigor Assessment, Pre-Job Brief, Independent Third Party Review and Post-Job Brief to incorporate CIAR 1608065-04 Recommendations 1, 2, 3, 4, 6, 7 and 8 per PCRA 1608065-16	02/27/2014
IR 1655458-45	CA to operations to track incorporation of the ABB Safe Channel Transfer Procedure into a Dresden Station Procedure	12/19/2014
IR 2427375	HU-AA-1212 Rev.05 Not Implemented	12/18/2014
IR 2437067	FWLC 2-0640-33 Failed; Resulting in Loss of Bailey FWLC Sys	01/14/2015
IR 2448891	U2 Reactor Scram	02/06/2015
IR 2480399	Exceeded Threshold for Initiating Events – White PI	04/06/2015
IR 2522403	June 2015 QRT Review of FWLC – FMCT- ATI 2437067-05	07/01/2015

AUDITS, ASSESSMENTS AND SELF-ASSESSMENTS

<u>Number</u>	<u>Description or Title</u>	<u>Date</u>
1646633	Root Cause Report – Main Power Transformer Failure	06/12/2014
1655458	Root Cause Report – Mid-cycle Forced Outage Due to Automatic Voltage Regulator Failure	08/26/2014
2437067	Root Cause Report – Two Reactor Scrams from FWLC with Reactor Recirc Pump Runback	03/13/2015

AUDITS, ASSESSMENTS AND SELF-ASSESSMENTS

<u>Number</u>	<u>Description or Title</u>	<u>Date</u>
2480399	Root Cause Report – Dresden Exceeded Threshold for Initiating Events White Performance Indicator	05/04/2015
2495346	Focused Area Self-Assessment, Readiness Assessment – Supplemental Inspection for NRC White ROP PI	05/22/2015

MISCELLANEOUS

<u>Number</u>	<u>Description or Title</u>	<u>Date or Revision</u>
E30-842-704	Unitrol 6080 Abnormal Operations Transfer Procedure Testing	0

B. Hanson

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The NRC determined that the programs and processes at Dresden Nuclear Power Station generally met the Commission's rules and regulations. The NRC has determined that completed or planned corrective actions are sufficient to address the performance that led to the White performance indicator. Therefore, the performance issue will not be considered as an Action Matrix input after the end of the first quarter of 2015. As a result, the NRC determined the performance at Dresden Nuclear Power Station, Unit 2, to be in the Licensee Response Column of the Reactor Oversight Process Action Matrix as of April 1, 2015.

Based on the results of this inspection, the NRC inspectors did not identify any findings or violations of more than minor significance. A finding of very-low safety significance (Green) was documented in NRC Inspection Report 05000237;05000249/2015002 for the licensee's failure to follow work instructions when installing the FWLC system which resulted in the January 13, 2015, and February 6, 2015, scram events.

In accordance with Title 10 of the Code of Federal Regulations (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Jamnes Cameron, Chief
Branch 4
Division of Reactor Projects

Docket No. 50-237
License No. DPR-19

Enclosure:
IR 05000237/2015009
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