UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

November 7, 2016

Mr. David A. Heacock
President
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

SUBJECT: NORTH ANNA POWER STATION – NRC INTEGRATED INSPECTION REPORT 05000338/2016003 AND 05000339/2016003

Dear Mr. Heacock:

On September 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your North Anna Power Station, Units 1 and 2. On October 19, 2016, the NRC inspectors discussed the results of this inspection with Mr. G. Bischof and other members of your staff. The results of this inspection are documented in the enclosed inspection report.

No NRC-identified or self-revealing findings were identified during inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Anthony D. Masters, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket Nos.: 05000338, 05000339
License Nos.: NPF-4, NPF-7

Enclosure:
IR 05000338/2016003 and 05000339/2016003
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

DISTRIBUTION:
See next page

Mr. David A. Heacock
President
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

SUBJECT: NORTH ANNA POWER STATION – NRC INTEGRATED INSPECTION REPORT 05000338/2016003 AND 05000339/2016003

Dear Mr. Heacock:

On September 30, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your North Anna Power Station, Units 1 and 2. On October 19, 2016, the NRC inspectors discussed the results of this inspection with Mr. G. Bischof and other members of your staff. The results of this inspection are documented in the enclosed inspection report.

No NRC-identified or self-revealing findings were identified during inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at http://www.nrc.gov/reading-rm/adams.html and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Anthony D. Masters, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket Nos.: 05000338, 05000339
License Nos.: NPF-4, NPF-7

Enclosure:
IR05000338/2016003 and 05000339/2016003
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

DISTRIBUTION:
See next page

DOCUMENT NAME: G:\DRPII\RPB5\NORTH ANNA\REPORTS\2016\2016-003\2016-03 FINAL
ADAMS ACCESSION NUMBER: ML16312A095

☒ SUNSI Review Complete By: Son Ninh	ADAMS ☒ Yes ☐ No	☒ Publicly Available ☐ Non-Publicly Available	☒ Non-Sensitive ☐ Sensitive	Keyword: SUNSI review complete

OFFICE	RII: DRP	RII: DRP	RII: DRP	RII: DRP	RII: DRS	RII: DRP	
NAME	GCroon	GEatmon	SNinh	BBishop	BCollins	AMasters	
SIGNATURE	GSC1 via email	GSC1 /RA for/	SON	BDB3 via email	BCC2 via e-mail	ADM2	
DATE	10/ /2016	10/ 2016	10/26/2016	10/25/2016	10/24/2016	11/07/2016	

OFFICIAL RECORD COPY

Letter to David A. Heacock from Anthony D. Masters dated November 7, 2016

SUBJECT: NORTH ANNA POWER STATION – NRC INTEGRATED INSPECTION REPORT 05000338/2016003 AND 05000339/2016003

DISTRIBUTION:
S. Price, RII
M. Kowal, RII
S. Maxey, RII
OE Mail
RIDSNRRDIRS
PUBLIC
RidsNrrPMNorthAnna Resource

U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos:	50-338, 50-339
License Nos:	NPF-4, NPF-7
Report No:	05000338/2016003 and 05000339/2016003
Licensee:	Virginia Electric and Power Company (VEPCO)
Facility:	North Anna Power Station, Units 1 & 2
Location:	Mineral, Virginia 23117
Dates:	July 1, 2016 through September 30, 2016
Inspectors:	G. Croon, Senior Resident Inspector G. Eatmon, Resident Inspector B. Collins, Reactor Inspector (Section 1R08)
Approved by:	Anthony D. Masters, Chief Reactor Projects Branch 5 Division of Reactor Projects

Enclosure

SUMMARY

IR 05000338/2016003, 05000339/2016003; 07/01/2016 – 09/30/2016; North Anna Power Station, Units 1 and 2. Routine Integrated Inspection Report

The report covered a three-month period of inspection by resident inspectors, and one inspector from the regional office. No NRC-identified or self-revealing findings were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 6.

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at approximately 100 percent rated thermal power (RTP). On September 10, 2016, the unit was taken offline for a planned refueling outage. The unit remained offline for the remainder of the inspection period.

Unit 2 began the period at approximately 100 percent RTP. On July 29, 2016, the unit was taken offline to repair a leak in an RCP seal return pipe. Unit 2 restarted on August 2, returned to RTP on August 3, and operated at RTP for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection

Impending Adverse Weather Conditions

a. Inspection Scope

The inspectors performed one site specific weather related inspection due to anticipated adverse weather conditions. The inspectors reviewed licensee adverse weather response procedures, including 0-AP-41, "Severe Weather Conditions," Revision 64, and site preparations including work activities that could impact the overall maintenance risk assessments.

- Outside site preparation, including inspection of drainage on August 31, 2016

b. Findings

No findings were identified.

1R04 Equipment Alignment

Partial Walkdowns

a. Inspection Scope

The inspectors conducted two equipment alignment partial walkdowns, listed below, to evaluate the operability of selected redundant trains or backup systems with the other train or system inoperable or out of service. The inspectors reviewed the functional systems descriptions, Updated Final Safety Analysis Report (UFSAR), system operating procedures, and Technical Specifications (TS) to determine correct system lineups for the current plant conditions. The inspectors performed walkdowns of the systems to verify the operability of a redundant or backup system/train or a remaining operable system/train with a high risk significance for the current plant configuration (considering out-of-service, inoperable, or degraded condition); or a risk-significant system/train that was recently realigned following an extended system outage, maintenance, modification

or testing; or a risk-significant single-train system. The inspector conducted the reviews to ensure that critical components were properly aligned, and to identify any discrepancies which could affect operability of the redundant train or backup system.

- Unit 1 and Unit 2 control room chillers when 'A' SW loop inoperable
- Unit 2 Fuel oil transfer train 'B' for 2J EDG when train 'A' inoperable

b. Findings

No findings were identified.

1R05 Fire Protection

Quarterly Fire Protection Walkdowns

a. Inspection Scope

The inspectors conducted focused tours of the four areas listed below that are important to reactor safety to verify the licensee's implementation of fire protection requirements as described in fleet procedures CM-AA-FPA-100, "Fire Protection/Appendix R (Fire Safe Shutdown) Program," Revision 10, CM-AA-FPA-101, "Control of Combustible and Flammable Materials," Revision 8, and CM-AA-FPA-102, "Fire Protection and Fire Safe Shutdown Review and Preparation Process and Design Change Process," Revision 5. The inspectors evaluated, as appropriate, conditions related to: (1) licensee control of transient combustibles and ignition sources; (2) the material condition, operational status, and operational lineup of fire protection systems, equipment, and features; and, (3) the fire barriers used to prevent fire damage or fire propagation. Other documents reviewed are listed in the Attachment to this report.

- Auxiliary building, 274' elevation with active welding and grinding were underway
- Emergency switchgear, Unit 1 & Unit 2
- Normal switchgear, Unit 1 & Unit 2
- Service water valve house, Unit 1 & Unit 2

b. Findings

No findings were identified.

1R08 Inservice Inspection Activities

a. Inspection Scope

Non-Destructive Examination Activities and Welding Activities

From September 19 – 23, 2016, the inspectors conducted an onsite review of the implementation of the licensee's inservice inspection (ISI) program for monitoring degradation of the reactor coolant system boundary, risk-significant piping and component boundaries, and containment boundaries in Unit 1.

The inspectors either directly observed or reviewed the following non-destructive examinations (NDEs) mandated by the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code of Record: 2004 Edition with no Addenda) to evaluate compliance with the ASME Code, Section XI and Section V requirements and, if any indications or defects were detected, to evaluate if they were dispositioned in accordance with the ASME Code or an NRC-approved alternative requirement. The inspectors also reviewed the qualifications of the NDE technicians performing the examinations to determine whether they were current and in compliance with the ASME Code requirements.

- Ultrasonic Examination (UT), residual heat removal system, 10" pipe-to-elbow weld 10-RH-12-35, ASME Code Class 1 (observed)
- Visual Examination (VE), reactor pressure vessel upper head, ASME Code Class 1 (observed)
- Liquid Penetrant Examination (PT), safety injection system, 12" pipe-to-pipe weld 12-SI-68-28H, ASME Code Class 1 (reviewed)

The inspectors either directly observed or reviewed the following welding activities, qualification records, and associated documents in order to evaluate compliance with procedures and the ASME Code, Section XI and Section IX requirements. Specifically, the inspectors reviewed the work order, repair and replacement plan, weld data sheets, welding procedures, procedure qualification records, welder performance qualification records, and NDE reports.

- Replacement of charging valve 01-CH-MOV-1267A, 6" pipe-to-valve and valve-to-pipe welds, ASME Code Class 2 (reviewed)

During non-destructive surface and volumetric examinations performed since the previous refueling outage, the licensee did not identify any relevant indications that were analytically evaluated and accepted for continued service; therefore, no NRC review was completed for this inspection procedure attribute.

PWR Vessel Upper Head Penetration Inspection Activities

The inspectors observed portions of the bare metal visual examination of the reactor vessel upper head penetrations and reviewed NDE reports for penetration numbers 53, 60, and 65 to determine if the examinations were performed in accordance with the requirements of ASME Code Case N-729-1 and 10 CFR 50.55a(g)(6)(ii)(D). Additionally, the inspectors reviewed the vendor inspection report to determine if the required examination coverage was achieved and if limitations were recorded in accordance with the licensee procedures.

The licensee did not identify any relevant indications that were accepted for continued service. Additionally, the licensee did not perform any welding repairs to the vessel head penetrations since the beginning of the last Unit 1 refueling outage; therefore, no NRC review was completed for these inspection procedure attributes.

Boric Acid Corrosion Control Inspection Activities

The inspectors reviewed the licensee's boric acid corrosion control (BACC) program activities to determine if the activities were implemented in accordance with the commitments made in response to NRC Generic Letter 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants," and applicable industry guidance documents. Specifically, the inspectors performed an onsite records review of procedures and the results of the licensee's containment walkdown inspections performed during the current refueling outage. The inspectors also interviewed the BACC program owner; conducted an independent walkdown of containment to evaluate compliance with licensee's BACC program requirements; and verified that degraded or non-conforming conditions, such as boric acid leaks, were properly identified and corrected in accordance with the licensee's BACC and corrective action programs.

The inspectors reviewed the following engineering evaluations, completed for evidence of boric acid leakage, to determine if the licensee properly applied applicable corrosion rates to the affected components; and properly assessed the effects of corrosion induced wastage on structural or pressure boundary integrity in accordance with the licensee procedures.

CR573530, Boric Acid Evaluation for 1-RH-HSS-1701
CR577527, Boric Acid Evaluation for 1-FC-P-1B
CR1020547, Boric Acid Evaluation for 01-SI-MOV-1836

The inspectors reviewed the following condition reports and associated corrective actions related to evidence of boric acid leakage to evaluate if the corrective actions completed were consistent with the requirements of the ASME Code and 10 CFR Part 50, Appendix B, Criterion XVI.

- CR562764, Boric Acid Leak from 1-SI-61
- CR1036581, Boric Acid Leak from 1-FC-P-1B
- CR1039171, Boric Acid Leak from 1-BR-P-10B
- CR1021933, Boric Acid Leak from 1-CH-78

Steam Generator Tube Inspection Activities

The inspectors verified that for the Unit 1 steam generator tubes, no inspection activities were required this refueling outage, in accordance with the requirements of the ASME Code, the licensee's Technical Specifications, and Nuclear Energy Institute 97-06, "Steam Generator Program Guidelines."

Identification and Resolution of Problems

The inspectors reviewed a sample of ISI-related issues entered into the corrective action program to determine if the licensee had appropriately described the scope of the problem and had initiated corrective actions. The review also included the licensee's consideration and assessment of operating experience events applicable to the plant. The inspectors performed this review to ensure compliance with 10CFR Part 50, Appendix B, Criterion XVI, "Corrective Action," requirements.

b. Findings

No findings were identified

1R11 Licensed Operator Requalification Program and Licensed Operator Performance

.1 Resident Inspector Quarterly Review

a. Inspection Scope

The inspectors reviewed a licensed operator performance on September 23, 2016, during a simulator scenario. The scenario required classifications and notifications that were counted for NRC performance indicator input.

The inspectors observed the following elements of crew performance in terms of communications: (1) ability to take timely and proper actions; (2) prioritizing, interpreting, and verifying alarms; (3) correct use and implementation of procedures, including the alarm response procedures; (4) timely control board operation and manipulation, including high-risk operator actions; and (5) oversight and direction provided by the shift supervisor, including the ability to identify and implement appropriate TS actions. The inspectors observed the post training critique to determine that weaknesses or improvement areas revealed by the training were captured by the instructor and reviewed with the operators. Documents reviewed are listed in the Attachment to this report.

b. Findings

No findings were identified.

.2 Quarterly Control Room Operator Performance Observations

a. Inspection Scope

During the inspection period, the inspectors conducted three observations of licensed reactor operators actions and activities to ensure that the activities were consistent with the licensee procedures and regulatory requirements. These observations took place during both normal and off-normal plant working hours. As part of this assessment, the inspectors observed the following elements of operator performance: (1) operator compliance and use of plant procedures including technical specifications; (2) control board/in-plant component manipulations; (3) use and interpretation of plant instruments, indicators and alarms; (4) documentation of activities; (5) management and supervision of activities; and, (6) communication between crew members.

The inspectors observed and assessed licensed operator performance during the following events:

- July 30, 2016 during increased Unit 2 unidentified leakage and shutdown decision
- August 2, 2016 during Unit 2 start up from forced outage
- September 10, 2016 during Unit 1 shutdown for planned refuel outage.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness

a. Inspection Scope

For the three equipment issues listed below, the inspectors evaluated the effectiveness of the respective licensee's preventive and corrective maintenance. The inspectors performed walkdowns of the accessible portions of the systems, performed in-office reviews of procedures and evaluations, and held discussions with licensee staff. The inspectors compared the licensee's actions with the requirements of the Maintenance Rule (10 CFR 50.65), and licensee procedure ER-AA-MRL-10, "Maintenance Rule Program," Revision 6. Other documents reviewed are listed in the Attachment to this report.

- WO59103005449, Replace 115/230V 250VDC power supply for N35.
- WO59102886942, 2-CH-FL-216, U2 charging pump recirc flow indicator
- WO59103000200, 1-SW-101A, repair of SW reservoir level indication

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors evaluated, as appropriate, the four activities listed below for the following: (1) effectiveness of the risk assessments performed before maintenance activities were conducted; (2) management of risk; (3) appropriate and necessary steps taken to plan and control the resulting emergent work activities upon identification of an unforeseen situation; and, (4) adequate identification and resolution of maintenance risk assessments and emergent work problems. The inspectors reviewed these maintenance activities to verify that the licensee was in compliance with the requirements of 10 CFR 50.65 (a)(4) and the data output from the licensee's safety monitor associated with the risk profile of Units 1 and 2. The inspectors reviewed the corrective action program to verify that deficiencies in risk assessments were being identified and properly resolved.

- 1-PT-33.13, Reactor Trip System Channel Operational Test for reactor Coolant Pump Buses 1A, 1B, and 1C Undervoltage, Revision 1
- 1-PT-70.1, Main Steam Safety Valve Setpoint Verification using Trevitest, Revision 11
- 1-PT-71.1Q, 1-FW-P-2, Turbine Driven Auxiliary Feedwater Pump and Valve Test, Revision 67
- 1-PT-71.4, AFW Pump Time Response and Logic test Including SW Pump and SBO Diesel Autostart Tests on U1 Loss of Reserve Power, Revision 40

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments

Operability and Functionality Review

a. Inspection Scope

The inspectors reviewed five operability determinations (OD) and functionality assessments, listed below, affecting risk-significant mitigating systems, to assess, as appropriate: (1) the technical adequacy of the evaluations; (2) whether continued system operability was warranted; (3) whether other existing degraded conditions were considered as compensatory measures; (4) whether the compensatory measures, if involved, were in place, would work as intended, and were appropriately controlled; and (5) where continued operability was considered unjustified, the impact on TS Limiting Conditions for Operation and the risk significance in accordance with the SDP. The inspectors' review included a verification that ODs were made as specified by procedure OP-AA-102, "Operability Determination," Revision 13. Other documents reviewed are listed in the Attachment.

- CR1041935, 1-QS-P-1A Motor station lube manual incorrect
- CR1042846, Unit 2 H2 gas analyzer found low and out of tolerance
- CA3036198, EDG fuel oil line excavation
- CA3038151, 1H EDG coolant biological activity
- CR1042100, Primary metrological tower out of service

b. Findings

No findings were identified.

1R18 Plant Modifications

.1 Temporary Modifications

a. Inspection Scope

The inspectors reviewed the one completed temporary plant modification design change packages (DCO) listed below. The inspectors conducted a walkdown of the installation, discussed the desired improvement with system engineers, and reviewed the 10 CFR 50.59, Safety Review/Regulatory Screening, technical drawings, test plans and the modification package to assess the TS implications. Other documents reviewed are listed in the Attachment to this report.

- Removal and Reinstallation of Service Water Manway Missile Protection

b. Findings

No findings were identified.

.2 Permanent Modifications

a. Inspection Scope

The inspectors reviewed the two completed permanent plant modification design change packages (DCO) listed below. The inspectors conducted a walkdown of the installation, discussed the desired improvement with system engineers, and reviewed the 10 CFR 50.59, Safety Review/Regulatory Screening, technical drawings, test plans and the modification package to assess the TS implications. Other documents reviewed are listed in the Attachment to this report.

- Engineering technical evaluation for IAV53 relay tolerance acceptance criteria revision
- Gear ratio change from 2-QS-MOV-202A/B, NA-16-00021

b. Findings

No findings were identified.

1R19 Post Maintenance Testing

a. Inspection Scope

The inspectors reviewed four post maintenance test procedures and/or test activities, listed below, for selected risk-significant mitigating systems to assess whether: (1) the effect of testing on the plant had been adequately addressed by control room and/or engineering personnel; (2) testing was adequate for the maintenance performed; (3) acceptance criteria were clear and adequately demonstrated operational readiness consistent with design and licensing basis documents; (4) test instrumentation had current calibrations, range, and accuracy consistent with the application; (5) tests were performed as written with applicable prerequisites satisfied; (6) jumpers installed or leads lifted were properly controlled; (7) test equipment was removed following testing; and, (8) equipment was returned to the status required to perform in accordance with VPAP-2003, “Post Maintenance Testing Program,” Revision 14.

- 1-FW-P-1B 3 year PM
- 2-EG-LS-2JA, fuel oil level switch for 2J EDG day tank
- 1/2 SW-PPA-1A2/2A2, SW spray array cleaning
- 2-BC-TIC-202, EHC TCV repair

b. Findings

No findings were identified.

1R20 Outage Activities

.1 Unit 2 Forced Outage for RCP Seal Return Line Leak

a. Inspection Scope

Unit 2 was shutdown on July 29, 2016, due to a leak in an RCP seal return line. The forced outage lasted until August 3, 2016. During the forced outage period, the inspectors used NRC inspection procedure 71111.20, "Refueling and Outage Activities," to observe portions of the maintenance and startup activities to verify that the licensee maintained defense-in-depth commensurate with outage risk assessments and applicable TS. The inspectors reviewed licensee actions for the outage activities listed below.

- Licensee configuration management, including daily outage reports, to evaluate defense-in-depth commensurate with the outage safety plan and compliance with the applicable TS when taking equipment out of service.
- Controls over the status and configuration of electrical systems and switchyard to ensure that TS and outage safety plan requirements were met.
- Decay heat removal processes to verify proper operation and that steam generators, when relied upon, were a viable means of backup cooling.
- Containment closure activities, including a focused containment walkdown prior to startup, to verify that there was no evidence of leakage and that debris had not been left which could affect the performance of the containment sump.
- Heat up and startup activities to verify TS, license conditions, and other requirements, commitments, and administrative procedure prerequisites for mode changes were met prior to changing modes or plant conditions. Reactor Coolant System (RCS) integrity was verified by reviewing RCS leakage calculations and containment integrity was verified by reviewing the status of containment penetrations and containment isolation valves.

b. Findings

No findings were identified.

.2 Unit 1 Refueling Outage

a. Inspection Scope

The inspectors reviewed the Outage Safety Review (OSR) and contingency plans for the Unit 2 refueling outage, which began September 10, 2016, to confirm that the licensee had appropriately considered risk, industry experience, and previous site-specific problems in developing and implementing a plan that assured maintenance of defense-in-depth. The inspectors also confirmed that the licensee had mitigation/response strategies in place for any losses of key safety functions. Using NRC inspection procedure 71111.20, "Refueling and Outage Activities," the inspectors observed portions of the refueling, and maintenance activities to verify that the licensee maintained defense-in-depth commensurate with the outage risk plan and applicable TS. The inspectors monitored licensee controls over the outage activities listed below.

- Licensee configuration management, including daily outage reports, to evaluate maintenance of defense-in-depth commensurate with the OSR for key safety functions and compliance with the applicable TS when taking equipment out of service.
- Implementation of clearance activities and confirmation that tags were properly hung and equipment appropriately configured to safely support the work or testing.
- Installation and configuration of Reactor Coolant System instrumentation for system pressure, level, and temperature to provide accurate indication, and an accounting for instrument error.
- Implementation of licensee procedures for foreign material exclusion.
- Controls over the status and configuration of electrical systems to ensure that TS and outage safety plan requirements were met, and controls over switchyard activities.
- Controls to ensure that outage work was not impacting the ability of the operators to operate the spent fuel pool cooling system.
- Reactor inventory controls including flow paths, configurations, and alternative means for inventory addition, and controls to prevent inventory loss.
- Controls over activities and SSCs which could affect reactivity.
- Fatigue management in accordance with meeting the rule requirements for each process.
- Refueling activities, including fuel handling operations (inspection, sipping, reconstitution and insertion), and fuel assemblies tracking, including new fuel, from core offload through core reload.
- Refueling activities, including fuel handling operations (inspection, sipping, reconstitution and insertion), and fuel assemblies tracking, including new fuel, from core offload through core reload.
- Controls over containment penetrations, per TS, such that containment closure could be achieved at all times.
- Licensee identification and resolution of problems related to refueling outage activities.
- Startup and ascension to full power operation, tracking of startup prerequisities, walkdown of the containment to verify that debris had not been left which could block emergency core cooling system strainers, and the review of reactor physics testing.

b. Findings

No findings were identified.

1R22 Surveillance Testing

a. Inspection Scope

For the six surveillance tests listed below, the inspectors examined the test procedures, witnessed testing, or reviewed test records and data packages, to determine whether the scope of testing adequately demonstrated that the affected equipment was functional and operable, and that the surveillance requirements of TS were met. The inspectors also determined whether the testing effectively demonstrated that the systems or components were operationally ready and capable of performing their intended safety functions.

In-Service Test:
- 1-PT-15.1, Boric Acid Transfer Pump (1-CH-P-2A) Test, Revision 36

RCS Leakage Detection
- 2-AP-16, Increasing Primary Plant Leakage, Revision 28

Containment Isolation Valve:
- 1-PT-57.5A, Leak Rate Test of 1-SI-P-1A and Associated Piping and Inservice Inspection for 1-SI-6, Revision 25

Other Surveillance Tests:

- 1-PT-58.3, Refueling Water Storage Tank – Boron Concentration, Revision 19
- 2-PT-36.17A, Channel Calibration for Station Blackout – Unit 2, Train A Bus 1E and Bus 1F, Revision 6
- 2-PT-77.11A, Control Room Chiller (2-HV-E-4A) Pump and Valve test, Revision 35

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification

a. Inspection Scope

The inspectors performed a periodic review of the three Unit 1 and 2 PIs listed below to assess the accuracy and completeness of the submitted data and whether the performance indicators were calculated in accordance with the guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 7. The inspection was conducted in accordance with NRC inspection procedure 71151, "Performance Indicator Verification." Specifically, the inspectors reviewed the Unit 1 and Unit 2 data reported to the NRC for the period July 1, 2015 through June 30, 2016. Documents reviewed included applicable NRC inspection reports, licensee event reports, operator logs, station performance indicators, and related CRs.

Cornerstone: Mitigating Systems
- MSPI Heat Removal (2 units)
- Safety System Functional Failures (2 units)

Cornerstone: Barrier Integrity
- Reactor Coolant System Activity (2 units)

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution

.1 Review of Items Entered into the Corrective Action Program

As required by NRC inspection procedure 71152, "Identification and Resolution of Problems," and in order to help identify repetitive equipment failures or specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished by reviewing daily CR report summaries and periodically attending daily CR Review Team meetings.

.2 Annual Sample: Review of CR 1045457, "Boric acid discovered on 2-CH-MOV-2289B"

a. Inspection Scope

The inspectors performed a review regarding the licensee's assessments and corrective actions for CR1045457 to ensure that the full extent of the issue was identified, an appropriate evaluation was performed, and appropriate corrective actions were specified and prioritized. The inspectors also evaluated the CR against the requirements of the licensee's CAP as specified in licensee procedure, PI-AA-200, "Corrective Action Program," Revision 25 and 10 CFR 50, Appendix B.

b. Findings and Observations

No findings were identified.

4OA6 Meetings, Including Exit

On October 19, 2016, the resident inspectors presented the inspection results to Mr. G. Bischof and other members of the staff, who acknowledged the findings. The inspectors verified no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee personnel:
M. Becker, Manager, Nuclear Outage and Planning
G. Bischof, Site Vice President
B. Gaspar, Manager, Nuclear Site Services
R. Hanson, Manager, Nuclear Protection Services
E. Hendrixson, Director, Nuclear Site Engineering
L. Hilbert, Director, Nuclear Station Safety & Licensing
J. Jenkins, Manager, Nuclear Maintenance
J. Leberstien, Technical Advisor, Licensing
F. Mladen, Plant Manager
J. Plossl, Supervisor, Nuclear Station Procedures
J. Schleser, Manager, Nuclear Organizational Effectiveness
J. Slattery, Manager, Nuclear Operations
W. Standley, Manager, Nuclear Training
D. Taylor, Manager, Station Licensing
M. Whalen, Technical Advisor, Licensing

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

None

Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Records and Data

Station Logs for August 30- September 1, 2016

Section 1R04: Equipment Alignment

Procedures, Guidance Documents, and Manuals

2-MOP-6.90, Maintenance Operating – Emergency Diesel Generator 2-EE-EG-2H, Revision 65
2-OP-6.1A, Valve Checkoff – 2H Diesel Engine Cooling Water, Revision 9
2-OP-6.6A, Emergency Generator Pre-Operation Check for 2H and 2J Diesel, Revision 33
2-OP-7.4A, Valve Checkoff – Quench Spray System, Revision 10 2-PT-63.4, Quench Spray and Chemical Addition System Valve Lineup Verification, Revision 10
2-PT-63.1B, Quench Spray System – "B" Subsystem, Revision 35
2-OP-6.8A, Valve Checkoff – Emergency Generator Fuel Oil System, Revision 8
2-PT-81.1B.1, Emergency Diesel Generator Fuel Oil Transfer Pumps 2-EG-P-2JA and 2-EG-P-2JB Comprehensive Test, Revision 3
2-PT-81.1B, Emergency Generator Fuel Oil Transfer Pumps 2-EG-P-2JA and 2-EG-P-2JB Quarterly Test, Revision 23
1-PT-214.6, Valve Inservice Inspection (Control Room Chiller Units Valve Position Indication), Revision 9
0-AP-55, Loss of Control Room/Emergency Swithgear Room Air Conditioning, Revision 8
0-OP-49.1A, Valve Checkoff – Service Water, Revision 47
ETE-NA-2011-0041, Evaluation of Control Room Chiller 1-HV-E-4A Cooling Capacity, Approved 7/7/2011
ETE-NA-2014-0024, Evaluation of Control Room Chiller 1-HV-E-4C Cooling Capacity, Approved 6/18/2014
ET CME 95-0073, Control Room Chiller Equipment Performance Test, 1/2-PT-77.13C, Approved 9/13/1995
0-GOP-5.8, LCO Tracking, Revision 9

Corrective Action Documents

CR533296, 2-QS-P-1B motor heaters not energized, 11/21/2013

Work Orders

59102679477

Other

Unit 2 Safety Related Work Order Review, April 3, 2016

Section 1R05: Fire Protection

Procedures, Guidance Documents, and Manuals

0-FPMP-2.12, Dry Chemical Fire Extinguisher Maintenance, Revision 3
0-FPMP-2.6, Fire Extinguisher and Hose Station Inspection – Aux Buildings, Fuel Building, Clean Change, Health Physics, and Units 1 and 2 Instrument Shop, Revision 2
CM-AA-FPA-10, Fire Protection/Appendix R (Fire Shutdown) Program, Revision 2
1-FS-S-3, Unit 1 Emergency Switchgear Instrument Rack and Air Conditioning Rooms Service Building, Elev. 254 ft (S-54) Safe Shutdown Equipment, Revision 13
2-FS-CC-1, Firefighting Preplan, Casing Cooling Pump House, Unit 2, Safe Shutdown Equipment, May 28, 1992

North Anna Ignition Source Permit for Hot Work in Auxiliary Building, 8/1/2016-8/5/2016
2-RC-P-1C Seal Return Weld Repair timeline, 8/2/2016
1-FS-AB-1, Auxiliary Building Firefighting Strategy Safe Shutdown Equipment, Revision 6
1-AP-20, Operation from the Auxiliary Shutdown Panel, Revision 27
1-FS-S-3, Unit 1 Emergency Switchgear Instrument Tack and Air Conditioning Rooms Service Building Elev. 254 Safe Shutdown Equipment, Revision 13
NAPS Appendix R Report, Table 7-1 Exemption Request Status, Revision 38
1-FS-S-4, Fire Fighting Preplan for Unit 1 & 2 Normal Switchgear Rooms Service Building Elev. 307", Revision 5
1-FS-SWVH-1, Firefighting Strategy Service Water Valve House, Revision 0
CM-AA-FPA-101, Control of Combustible and Flammable Materials, Revision 8

Section 1R08, Inservice Inspection Activities

Procedures:
ER-AA-NDE-PT-300, ASME Section XI Liquid Penetrant Examination Procedure, Rev. 7
ER-AA-NDE-VT-605, IWE Visual Examination Procedure, Rev. 0
ER-AP-BAC-10, Boric Acid Corrosion Control Program, Rev. 12
ER-AP-BAC-101, Boric Acid Corrosion Control Program (BACCP) Inspections, Rev. 12
ER-AP-BAC-102, Boric Acid Corrosion Control Program (BACCP) Evaluations, Rev. 13
ER-NA-INS-104, Monitoring of Structures North Anna Power Station, Rev. 3

Drawings:
11715-FC-16A, Drawing: "Plan & Details EL 216'-11" SH 1 Interior Conc Reactor Cont North Anna Power Station – Unit 1," Rev. 18
12050-FC-16A, Drawing: "Plan & Dets El. 216'-11" Sh. 1 Interior Conc. Reactor Cont. North Anna Power Station – Unit 2," Rev. 9
12050-FC-16AG, Drawing: "Plan & Dets. El. 216'-11" Sh. 3 Interior Conc. Reactor Cont. North Anna Power Station Unit 2," Rev. 8

Self-Assessments:
ETE- SAR002813, Boric Acid Corrosion Control Program (BACCP) Self-Assessment, dated 25 Nov. 2014

Work Orders/Work Requests:
59051924701, Work Order: Repair Basement Floor Construction Joint, dated 12/28/2011
59102841667, Work Order: Replace 01-CH-MOV-1267A Valve, dated 7/25/2016
Dominion Nuclear Welding Program Weld Data Record (WO59102851667, Weld No. 1), dated 9-23-16
Dominion Nuclear Welding Program Weld Data Record (WO59102851667, Weld No. 12), dated 9-2-16
Dominion Nuclear Welding Program Weld Data Record (WO59102851667, Weld No. SW72), dated 9-7-16
Dominion Nuclear Welding Program Weld Data Record (WO59102851667, Weld No. SW19W), dated 9-3-16
Dominion Nuclear Welding Program Weld Data Record (WO59102851667, Weld No. 95), dated 9-23-16

Condition Reports:
BACCP Evaluation Form (CR573530), dated 03/21/2015
BACCP Evaluation Form (CR577527), dated 05/14/2015

BACCP Evaluation Form (CR1020547), dated 12/10/2015
CR1030873, Condition Report: "NRC Concern – Containment Liner to Basemat Interface," dated 03/17/2016

NDE Examiner Quals:
Curtiss-Wright Certificate of Visual Acuity and Color Vision (Block), dated 8/16/16
Curtiss-Wright Certification of Visual Acuity and Color Vision per LMT Procedure PVE-1 (Orth), dated 07.21.2016
Curtiss-Wright Certification of Visual Acuity and Color Vision per LMT Procedure PVE-1 (Thompson), dated 7/27/16
Curtiss-Wright Personnel Certification Statement: Liquid Penetrant (Orth), dated 8/5/2016
Curtiss-Wright Personnel Certification Statement: Liquid Penetrant (Thompson), dated 08/05/2016
Curtiss-Wright Personnel Certification Statement: UT (Block), dated 08/06/2016

Miscellaneous Documents:
180-9262442-000, AREVA NDE Services Final Report: North Anna 1 U1R25 Bare Metal Visual Examination (VE), dated 9/29/16
801, Procedure Qualification Record, Rev. 2
803, Welding Technique Sheet, Rev. 9
805, Procedure Qualification Record, Rev. 3
809, Procedure Qualification Record, Rev. 2
830, Procedure Qualification Record, dated 7/20/01
831, Procedure Qualification Record, dated 7/20/01
Certificate of Certification – Spotcheck Cleaner, SKC-S, dated 6/20/14
Certificate of Certification – Spotcheck Developer, SKD-S2, dated 6/20/14
Certificate of Certification – Spotcheck Penetrant, SKL-SP2, dated 1/25/12
Dominion Measuring and Test Equipment Calibration Certificate – Thermometer, Digital (ATK-3), dated 02/17/2016
ER-AA-NDE-VT-605, Report: Visual Examination of IWE Interfaces, dated 9/15/10
ER-AA-NDE-VT-605, Report: Visual Examination of IWE Interfaces, dated 3-8-15
ETE-NA-2015-0020, Condition Assessment of Plant Structures (Third Five-Year Inspection Interval), Rev. 0
ETE-NA-2016-006, North Anna Unit 1 Review of SG Skip Inspection Determination, Rev. 0
NA-2016-64, Engineering Technical Evaluation: North Anna Unit 1 Review of SG Skip Inspection Determination, dated 8-23-16
ET-N-07-0120, Monitoring of Structures – Report of 5 Year Periodic Inspections, dated 11/6/08
Krautkramer Transducer Certification (UT, Serial # 00F1DF), dated 07-26-1999
Krautkramer Transducer Certification (UT, Serial # 00F1DL), dated 07-26-1999
MAGNAFLUX Certificate of Certification (UltraGel II couplant), dated 9/28/12
PT-16-025, Liquid Penetrant Examination, dated 9/23/2016
UT-16-087, UT Calibration/Examination Report, dated 9/20/2016
VE-16-010, Report: Visual Examination – RPVH and Nozzles, dated 9/23/2016
Welder Performance Qualification: Manual GTAW (Hamilton), dated 03/01/2010
Welder Performance Qualification: Manual GTAW (McGlothlin), dated 06/17/2008
Welder Performance Qualification: Manual GTAW/SMAW (Hamilton), dated 03/11/2016
Welder Performance Qualification: Manual GTAW/SMAW (McGlothlin), dated 04/16/2008
Weldstar Certificate of Compliance/Conformance (Shipping # N1052529), dated September 23, 2014

Weldstar Certificate of Compliance/Conformance (Shipping # N1068328), dated January 30, 2015

Section 1R12: Maintenance Effectiveness

Procedures, Guidance Documents, and Manuals

MA-AA-100, Conduct of Maintenance, Revision 10
WM-AA-100, Work Management, Revision 25
WM-AA-101, Work Order Planning, Revision 5

Work Orders

WO5910299844
WO59103005449
WO59102886942
WO59103000200

Section 1R13: Risk Assessment

Procedures, Guidance Documents, and Manuals

0-AP-41, Severe Weather Conditions, Revision 65
1-PT-33.13, Reactor Trip System Channel Operational Test for reactor Coolant Pump Buses 1A, 1B, and 1C Undervoltage, Revision 1
1-PT-70.1, Main Steam Safety Valve Setpoint Verification using Trevitest, Revision 11
1-PT-71.1Q, 1-FW-P-2, Turbine Driven Auxiliary Feedwater Pump and Valve Test, Revision 67
1-PT-71.4, AFW Pump Time Response and Logic test Including SW Pump and SBO Diesel Autostart Tests on U1 Loss of Reserve Power, Revision 40
High Risk Contingency Plan Actions for "Excavate the ten fuel oil pipes for License NF-AA-PRA-370, Probabilistic Risk Assessment Procedures and Methods: MRule (a)(4) Risk Monitor Guidance, Revision 16
Renewal/Underground Piping and Tank Integrity Program Inspection," Approved January 28, 2016
RIS 01-009: Control of Hazard Barriers, April 2, 2001

Corrective Action Documents

CR1034958, Inadequate temporary tornado missile protection recommended by Engineering, 4/20/2016

Records and Data

WM-AA-301, Operation Risk Assessment, Revision 11
North Anna Power Station Logs for April 18-28, 2016
Calculation CE-1802, Design of Temporary Missile Shield Required for the Service Water Lines Manway Shaft Excavation, July 28, 2005
ET-N-10-0010, Technical Information for Developing a Missile Barrier TRM, Revision

Section 1R15: Operability Determinations and Functionality Assessments

Procedures, Guidance Documents, and Manuals

0-AP-41, Severe Weather Conditions, Revision 65
0-MCM-1110-02, Installation of the Reactor Vessel Head, Revision 48
0-OP-4.16, Pre-Core Loading, Core Mapping and Fuel Assembly Gap Inspection, Revision 20
0-PT-67B, Post-DBA Hydrogen Analyzer Calibration, Revision 5
1-MOP-7.07, Quench Spray Pump 1-QS-P-1A, Revision 19
1-PT-63.1A, Quench Spray System – 'A' Subsystem, Revision 37

AD-AA-100-Attachment 2, Technical Procedure Approval for '0-MCM-1110-02, Installation of
AD-AA-100-Attachment 2, Technical Procedure Approval for '0-OP-4.16, Pre-Core Loading,
OP-AA-102-1001, Development of Technical Basis to Support Operability, Revision 10
the Reactor Vessel Head,' dated March 25, 2016
Core Mapping, and Fuel Assembly Gap Inspection," dated March 26, 2016
FME Recovery Plan for the Missing Screw from the Gauge Tool in the Unit 2 Vessel, Revision 1
WM-AA-301, Operation Risk Assessment, Revision 11
ET-N-10-0010, Technical Information for Developing a Missile Barrier TRM
4/20/2016
High Risk Contingency Plan Actions for "Excavate the ten fuel oil pipes for License
Renewal/Underground Piping and Tank Integrity Program Inspection," Approved January 28,
2016
RIS 01-009: Control of Hazard Barriers, April 2, 2001
NF-AA-PRA-370, Probabilistic Risk Assessment Procedures and Methods: MRule (a)(4) Risk
Monitor Guidance, Revision 16
OD3037973, 1H Emergency Diesel Generator Expansion Tank Level Change

Corrective Action Documents
ACE3038151, Microbiological Activity in the EDG Cooling Water System
CA3026894, Prior to Core Onload – Engineering to document retrieval of screws from the
FSCR #16-022, Facility Safety Review Committee Meeting for "LTR-RES-1650-Westinghouse
Letter - Reactor Coolant Pump (RCP) Evaluation for Missing Screw from Gauging Tool at
North Anna Unit 2," March 27, 2016
CA3036198, Basis for Operability of Underground Fuel Oil Piping During Periods of Excitation
CR1030800, FMR Inspection of Long Handled Tool Working in Cavity Unsat, March 17, 2016
CR1032656, Data Obtained for step 6.2.15 of 2-PT-138.3B is below the pump perf. curve.
CR1037139, Degraded southeast baseplate on 2J EDG exhaust pipe support SH-127,
May 10, 2016
CR1041935, 1-QS-P-1A-motor Station Lube Manual incorrect
CR1042846, 2-HC-H2A-201 10% H2 gas input found low and out of tolerance
CR1034958, Inadequate temporary tornado missile protection recommended by Engineering,
CR1045735, 1H EDG radiator expansion tank level off scale high

Records and Data
NAPS U2 Operations Log for March 27, 2016
Evaluation from Westinghouse regarding the Reactor Coolant Pump (RCP) Evaluation for
Missing Screw from Gauging Tool at North Anna Unit 2 dated March 21, 2016
ETE-NA-2016-0030, Engineering Technical Evaluation of 2-PT-138.3B Test Results,
April 5, 2016
Eval-16-11, North Anna 2 – Operating with Potential Primary Side Loose Part, Revision 1
North Anna Narrative log for 7/11/2016 - 7/14/2016 regarding 1-QS-P-1A

Work Order
WO 59102993325

Other
OD3031263, 2J EDG exhaust pipe support non-conforming, May 12, 2016
Calculation CE-1802, Design of Temporary Missile Shield Required for the Service Water Lines
Manway Shaft Excavation, July 28, 2005

Section 1R18: Plant Modifications

Procedures, Guidance Documents, and Manuals

CM-AA-DDC-201, Design Changes, Revision 16
0-OP-62.1, Operation of Area Radiation Monitors, Revision 8
1-OP-62.3, Process Radiation Monitors, Revision 21
ETE-NA-2016-0056, IAV53 Relay Tolerance Acceptance Criteria Revision, 7/28/2016
2-PT-36.17A, Channel Calibration for Station Blackout – Unit 2 Train A Bus 1E and Bus 1F, Revision 6
CR1045912, 1-QS-MOV-102B Increase seat loading,
CR1030529, Measured unseating thrust on 2-QS-MOV-202A exceeds maximum allowable valve
NA-16-00021, Overall Gear Ratio Change for 2-QS-MOV-202A/B, 3/21/2016
Calculation CE-1802, Design of Temporary Missile Shield Required for the Service Water Lines Manway Shaft Excavation, July 28, 2005
Design Change 92-008, Addition of Manways on 36-inch SW Headers/NAPS/Units 1&2, 5/19/2004
CM-AA-100, 10CFR50.59 and 10CFR72.48 – Changes, Tests, and Experiments, Revision 7
CM-AA-TCC-204, Temporary Configuration Changes, Revision 2
Technical Procedure Approval GMP-C-131, Removal and Reinstallation of Service Water Manway Missile Protection, Revision 1
GMP-C-131, Removal and Reinstallation of Service Water Manway Missile Protection, Revision 2
WO59102922103, Work Order Request for Excavation of 'B' Service Water Supply Line, 7/14/2016

Records and Data

TM-59-02-2016-120, Extension to Unit 2 Head Vent Splatter Shield

Section 1R19: Post Maintenance Testing

Procedures, Guidance Documents, and Manuals

1-MCM-1401-02, Removal and Installation of U1 Terry Turbine Woodward Governor, Revision 6
1-PT-71.1Q, 1-FW-2, Turbine Driven Auxiliary Feedwater Pump and Valve Test, Revision 61
0-PT-89.9L, Pressure Test of Line from 2-EG-P-2JA to 2-EG-TK-2J, completed 8/16/2016
2-PT-81.2B, Valve Inservice Inspection (Check valves 2-EB-51 and 2-EB-85, completed 8/11/2016
2-PT-82J, 2J Emergency Diesel Generator Slow Start Test, completed 8/17/2016
2-PT-82.2B, 2J Diesel Generator Test (Simulated Loss of Off-Site Power), Revision 76

Corrective Action Documents

CR572803, 1-FW-P-2 (Steam Driven AFW pump) governor did not maintain speed during PT
CR1041953, 2-EG-LS-2JA, 2-E-P-2JA FO Pump did not stop on high level

Work Orders

WO59102099196
WO59102982087
WO59102982084
WO59102982092
WO59102793853
WO59102993390

Section 1R21: Component Design Basis Inspection

Calculations

NA-CALC-ELE-14258.79-E-4 (ADD-001-00C), Short Circuit Currents-120VAC Vital Buses and Miscellaneous Circuits-Appendix R Evaluation, Revision 1
Technical Report EE-0118, 10CFR50 Appendix 'R' Electrical Distribution System Coordination Study, Revision 2

Section 1R22: Surveillance Testing

Procedures, Guidance Documents, and Manuals

1-PT-15.1, Boric Acid Transfer Pump (1-CH-P-2A) Test, Revision 36
1-PT-57.5A, Leak Rate Test of 1-SI-P-1A and Associated Piping and Inservice Inspection for 1-SI-6, Revision 25
1-PT-58.3, Refueling Water Storage Tank Boron Concentration, Revision 19
2-AP-16, Increasing Primary Plant Leakage, Revision 28
2-PT-36.17A, Channel Calibration for Station Blackout Unit 2 Train A Bus 1E and Bus 1F, Revision 6
2-PT-77.11A, Control Room Chiller (2-HV-E-4A) Pump and Valve test, Revision 35
CH-21.501, Refueling Water Storage Tank: Sampling from 2-QS-P-2A or 2-QS-P-2B, Refueling
CR1043347, Undervoltage Relay failed testing during PT
Drawing 11715-ESK-11P, Loss of Reserve Station Power, Revision 3

Section 4OA1: Performance Indicator Verification

Records and Data

North Anna Power Station Engineering Department MSPI and WANO Data for July, 2015
North Anna Power Station Engineering Department MSPI and WANO Data for August, 2015
North Anna Power Station Engineering Department MSPI and WANO Data for September, 2015
North Anna Power Station Engineering Department MSPI and WANO Data for October, 2015
North Anna Power Station Engineering Department MSPI and WANO Data for November, 2015
North Anna Power Station Engineering Department MSPI and WANO Data for December, 2015
North Anna Power Station Engineering Department MSPI and WANO Data for January, 2016
North Anna Power Station Engineering Department MSPI and WANO Data for February, 2016
North Anna Power Station Engineering Department MSPI and WANO Data for March, 2016
North Anna Power Station Engineering Department MSPI and WANO Data for April, 2016
North Anna Power Station Engineering Department MSPI and WANO Data for May, 2016
North Anna Power Station Engineering Department MSPI and WANO Data for June, 2016

Section 4OA2: Problem Identification and Resolution

Procedures, Guidance Documents, and Manuals

PI-AA-200, Corrective Action Program, Revision 25

Corrective Action Documents

CR 1045457, Boric Acid Discovered on 2-CH-MOV-2289B