



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 27, 2015

Mr. David A. Heacock
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2, ISSUANCE OF
AMENDMENTS TO CHANGE THE REACTOR COOLANT SYSTEM
PRESSURE AND TEMPERATURE LIMITS REGARDING VACUUM FILL
OPERATIONS (TAC NOS. MF4707 AND MF4708)

Dear Mr. Heacock:

The U.S. Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment Nos. 275 and 257 to Renewed Facility Operating License Nos. NPF-4 and NPF-7 for the North Anna Power Station (NAPS), Unit Nos. 1 and 2, respectively. The amendments change the Technical Specifications (TSs) in response to your application dated August 27, 2014, as supplemented by letter dated February 16, 2015.

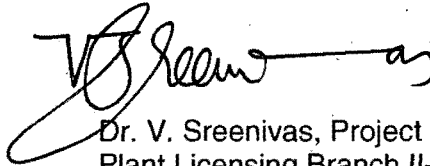
These amendments revise TS 3.4.3, "[Reactor Coolant System] RCS Pressure and Temperature (P-T) Limits" to address vacuum fill operations of the RCS and meet the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix G. Specifically, the revisions to TS figures 3.4.3-1 and 3.4.3-2 include: (1) the extension of the temperature axes to reflect temperatures up to RCS full power operation; (2) the extension of the pressure axes to less than 0 pounds per square inch gage (psig) to bound RCS conditions when vacuum-assist fill of the RCS loops is performed; and (3) the addition of information regarding the reactor boltup temperature.

D. A. Heacock

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A copy of the Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read 'V. Sreenivas', with a long horizontal flourish extending to the right.

Dr. V. Sreenivas, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosures:

1. Amendment No. 275 to NPF-4
2. Amendment No. 257 to NPF-7
3. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-338

NORTH ANNA POWER STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 275
Renewed License No. NPF-4

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to North Anna Power Station, Unit 1 (the facility) Renewed Facility Operating License No. NPF-4 filed by the Virginia Electric and Power Company, (the licensee) dated August 27, 2014, as supplemented by letter dated February 16, 2015, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

Enclosure 1

2. Accordingly, the license is hereby amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-4 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 275 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-4
and the Technical Specifications

Date of Issuance: July 27, 2015



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

VIRGINIA ELECTRIC AND POWER COMPANY

DOCKET NO. 50-339

NORTH ANNA POWER STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 257
Renewed License No. NPF-7

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment to North Anna Power Station, Unit 2 (the facility) Renewed Facility Operating License No. NPF-7 filed by the Virginia Electric and Power Company, (the licensee) dated August 27, 2014, as supplemented by letter dated February 16, 2015, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

Enclosure 2

2. Accordingly, the license is hereby amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-7 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 257 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to Renewed Facility
Operating License No. NPF-7
and the Technical Specifications

Date of Issuance: July 27, 2015

ATTACHMENT TO
LICENSE AMENDMENT NO. 275
RENEWED FACILITY OPERATING LICENSE NO. NPF-4
DOCKET NO. 50-338
AND
TO LICENSE AMENDMENT NO. 257
RENEWED FACILITY OPERATING LICENSE NO. NPF-7
DOCKET NO. 50-339

Replace the following pages of the Renewed Facility Operating Licenses and the Appendix "A" Technical Specifications (TSs) with the enclosed pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

Licenses

License No. NPF-4, page 3
License No. NPF-7, page 3

TSs

Remove

3.4.3-3
3.4.3-4

Insert Pages

Licenses

License No. NPF-4, page 3
License No. NPF-7, page 3

TSs

Insert

3.4.3-3
3.4.3-4

- (2) Pursuant to the Act and 10 CFR Part 70, VEPCO to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report;
 - (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or component; and
 - (5) Pursuant to the Act and 10 CFR Parts 30 and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:
- (1) Maximum Power Level
VEPCO is authorized to operate the North Anna Power Station, Unit No. 1, at reactor core power levels not in excess of 2940 megawatts (thermal).
 - (2) Technical Specifications
The Technical Specifications contained in Appendix A, as revised through Amendment No. 275 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use at any time any byproduct, source, and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
 - (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material, without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
 - (5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, VEPCO to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
- C. This renewed license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations as set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

VEPCO is authorized to operate the facility at steady state reactor core power levels not in excess of 2940 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 257 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Additional Conditions

The matters specified in the following conditions shall be completed to the satisfaction of the Commission within the stated time periods following the issuance of the condition or within the operational restrictions indicated. The removal of these conditions shall be made by an amendment to the renewed license supported by a favorable evaluation by the Commission:

- a. If VEPCO plans to remove or to make significant changes in the normal operation of equipment that controls the amount of radioactivity in effluents from the North Anna Power Station, the

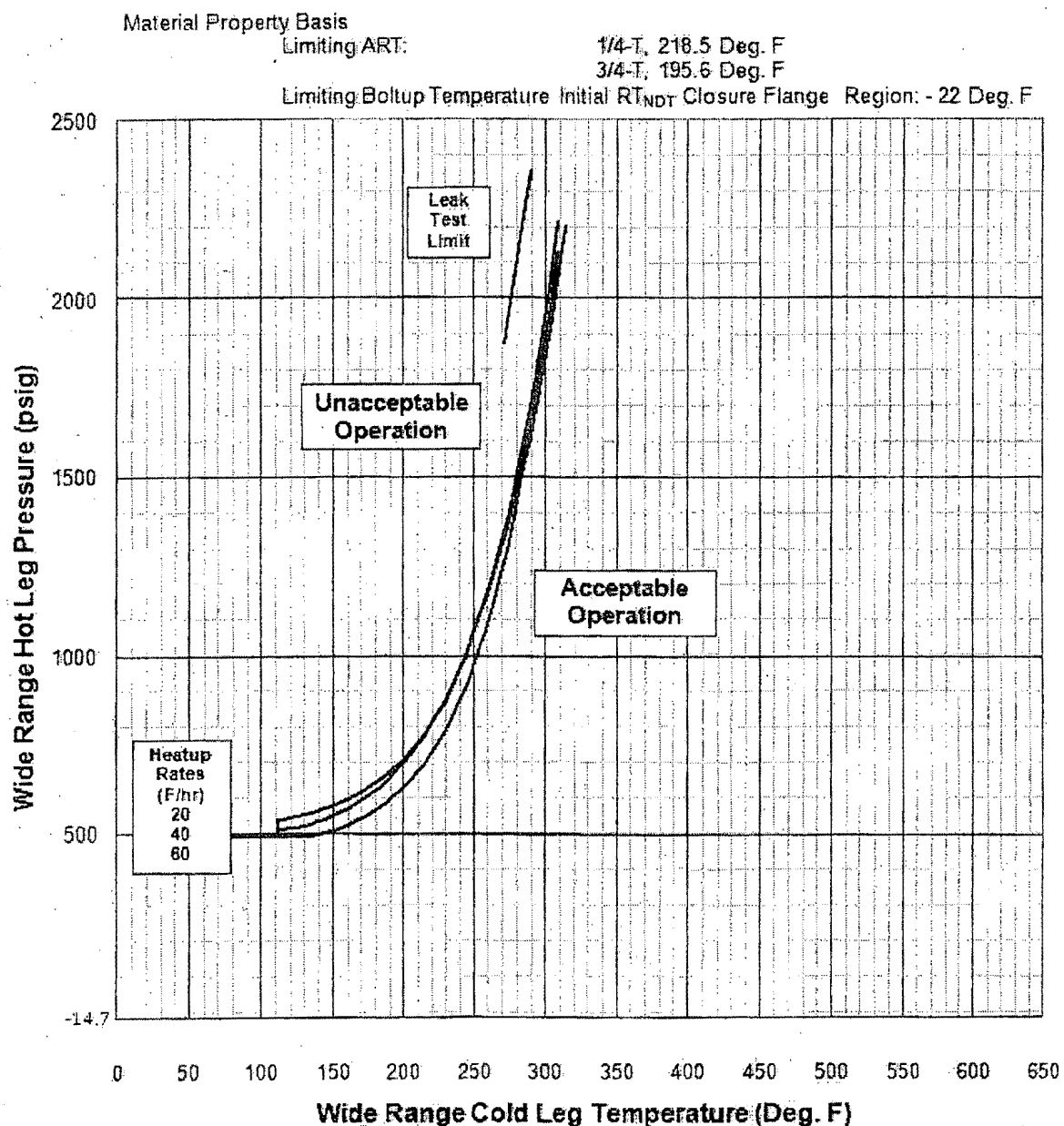


Figure 3.4.3-1 (page 1 of 1)
North Anna Units 1 and 2 Reactor Coolant System Heatup Limitations
(Heatup Rates up to 60°F/hr),
Applicable for the first 50.3 EFPY for Unit 1, and 52.3 EFPY for Unit 2
(Including Margins for Instrumentation Errors)

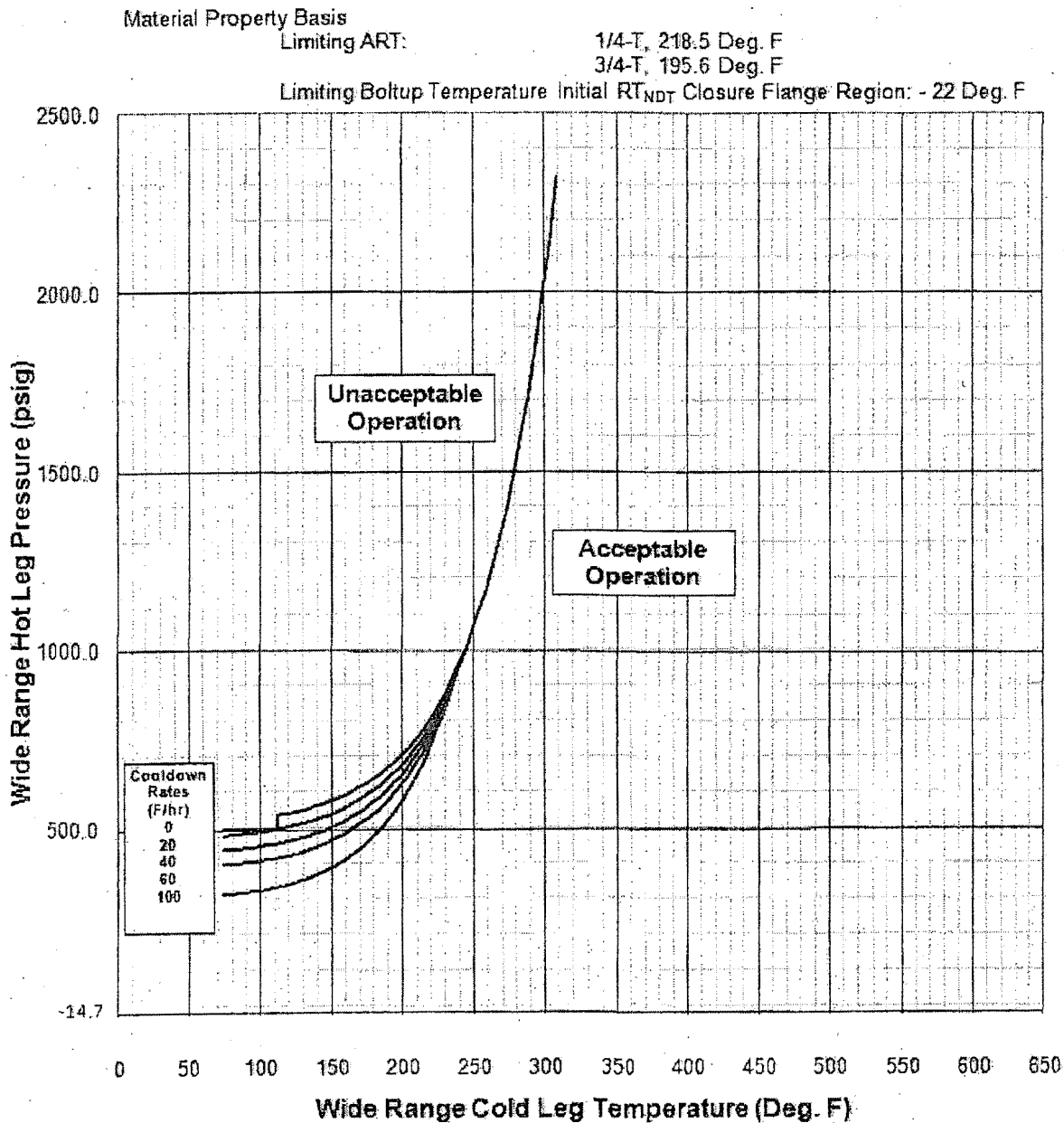


Figure 3.4.3-2 (page 1 of 1)
North Anna Units 1 and 2 Reactor Coolant System Cooldown Limitations
(Cooldown Rates up to 100°F/hr),
Applicable for the first 50.3 EFPY for Unit 1, and 52.3 EFPY for Unit 2
(Including Margins for Instrumentation Errors)



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 275 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-4

AND

AMENDMENT NO. 257 TO RENEWED FACILITY OPERATING LICENSE NO. NPF-7

VIRGINIA ELECTRIC AND POWER COMPANY

NORTH ANNA POWER STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-338 AND 50-339

1.0 INTRODUCTION

By letter dated August 27, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14246A190), as supplemented by letter dated February 16, 2015, ADAMS Accession No. ML15051A368), the Virginia Electric and Power Company (the licensee) requested changes to the Technical Specification (TS) for Facility Operating License Nos. NPF-4 and NPF-7 for North Anna Power Station, Units 1 and 2 (NAPS, 1 and 2), respectively. The supplemental letter dated February 16, 2015, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on October 14, 2014 (79 FR 61663).

The proposed changes would revise TS 3.4.3, "[Reactor Coolant System] RCS Pressure and Temperature (P-T) Limits." Specifically, TS figures 3.4.3-1 and 3.4.3-2 would be revised for clarification and to be fully representative of the allowable operating conditions during Reactor Coolant System (RCS) startup and cooldown evolutions. The proposed revisions to TS Figures 3.4.3-1 and 3.4.3-2 include: (1) the extension of the temperature axes to reflect temperatures up to RCS full power operation; (2) the extension of the pressure axes to less than 0 pounds per square inch gage (psig) to bound RCS conditions when vacuum-assist fill of the RCS loops is performed; and (3) the addition of information regarding the reactor boltup temperature.

2.0 REGULATORY EVALUATION

The NRC has established requirements in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 to protect the integrity of the reactor coolant pressure boundary (RCPB) in nuclear power plants. The NRC staff evaluates the acceptability of a facility's P-T limits based on the

following NRC regulations and guidance: Appendix G, "Fracture Toughness Requirements," to 10 CFR Part 50; Appendix H, "Reactor Vessel Material Surveillance Program Requirements," to 10 CFR Part 50; Regulatory Guide (RG) 1.99, Revision 2, "Radiation Embrittlement of Reactor Vessel Materials," Generic Letter (GL) 92-01, Revision 1, "Reactor Vessel Structural Integrity," and GL 92-01, Revision 1, Supplement 1, "Reactor Vessel Structural Integrity." Appendix G to 10 CFR Part 50 requires that facility P-T limits for the reactor vessel (RV) be at least as conservative as those obtained by applying the linear elastic fracture mechanics methodology of Appendix G to Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code). Additionally, Appendix G to 10 CFR Part 50 imposes minimum RV closure flange temperatures when system pressure is at or above 20% of the preservice hydrostatic test pressure. Appendix H to 10 CFR Part 50 establishes requirements related to facility RV material surveillance programs. RG 1.99, Revision 2 contains methodologies for determining the increase in transition temperature and the decrease in upper shelf energy resulting from neutron irradiation.

3.0 TECHNICAL EVALUATION

3.1 Licensee's Evaluation

The licensee's August 27, 2014 LAR proposes the following changes to the TS figures for the NAPS, Units 1 and 2, P-T limits curves:

- The temperature axes are extended from 350 degrees Fahrenheit (°F) to 650°F, which bounds temperatures up to RCS full power operation.
- The pressure axes are extended from 0 psig to -14.7 psig to bound RCS conditions to support vacuum-assist fill of the RCS loops.
- The phrase, "Limiting Boltup Temperature North Anna Initial RT_{NDT} Closure Flange Region: -22°F," is added, since the current figures do not address boltup temperature.

According to the licensee, the extension of the temperature axes reflects the maximum temperature corresponding to the reactor vessel design temperature of 650°F. The pressure axes are extended from 0 psig to -14.70 psig to bound RCS conditions to support vacuum-assist fill of the RCS loops. An engineering evaluation found that the RCS loop piping and steam generator tubing maintain their structural integrity "with considerable margin" during vacuum-assist loop fill.

The LAR also notes that the licensee will make the following revisions to the Applicability Section of TS 3.4.3 Basis:

- A statement is added to indicate that vacuum-assist fill of the RCS loops in Cold Shutdown or Refueling Shutdown is an acceptable condition and is located on the "Acceptable Operation" region of the proposed TS Figures 3.4.3-1 and 3.4.3-2.
- Description of the reactor boltup temperature is added which identifies the phrase, "Limiting Boltup Temperature Initial RT_{NDT} Closure Flange Region: -22°F," since the current figures do not address boltup temperature.

The proposed revision to the TS Basis states that the reactor boltup temperature is defined in 10 CFR Part 50, Appendix G as "the highest reference temperature of the material in the closure flange region that is highly stressed by the bolt preload."

3.2 NRC Staff's Evaluation

The licensee's August 27, 2014, LAR proposed changes to the TS figures 3.4.3-1 and 3.4.3-2 for the P-T limit curves for NAPS, Units 1 and 2, that extend the pressure axis to -14.7 psig and the temperature axis to 650°F. The revisions clarify, consistent with existing requirements, that pressure limits are considered to be met for pressures that are below 0 psig (i.e., up to and including full vacuum conditions). Certain operating practices, such as vacuum fill operations for the RCS, are common practice in both boiling water reactors and pressurized water reactors and can result in system pressures below 0 psig. Although the RV is not specifically evaluated for negative pressures, the magnitude of the negative pressure is limited to one atmosphere and thus is not expected to result in significant stresses. Extension of the temperature axis to 650°F likewise bounds the operating temperatures over the currently approved range of RCS full power operation. Therefore, the staff finds the revisions to the NAPS, 1 and 2, TSs extending the temperature axes to 650°F and pressure axes below 0 psig to be acceptable.

As revised, Figures 3.4.3-1 and 3.4.3-2 would each contain an additional note stating, "Limiting Boltup Temperature North Anna Initial RT_{NDT} Closure Flange Region: -22°F." This note is a true statement and is consistent with existing requirements. Therefore, the staff finds the additional note acceptable.

However, the limiting boltup temperature of the closure flange region and the administrative minimum boltup temperature for NAPS, 1 and 2, is 60°F. This is demonstrated in previous submittals, including the Updated Final Safety Analysis Report Table 5.2-26, "Pre-Irradiation Reactor Vessel Toughness Table (Unit 1)" and Table 5.2-27, "Pre-Irradiation Reactor Vessel Toughness Table (Unit 2)." The P-T limits for NAPS, Units 1 and 2, were developed following WCAP-14040-A, Revision 4, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoint and RCS Heatup and Cooldown Limit Curves" (ADAMS Accession No. ML050120209). WCAP-14040-A Section 2.10, ("Minimum Boltup Temperature") states, "the RT_{NDT} is calculated in accordance with the methods described in Branch Technical Position MTEB 5-2. The Westinghouse position is that the minimum boltup temperature be no lower than 60°F. Thus, the minimum boltup temperature should be 60°F or the material RT_{NDT} whichever is higher." The NAPS Summary of Facility Changes, Tests and Experiments (ADAMS Accession No. ML030700112) states that, "Westinghouse developed a generic minimum bolt-up temperature of 60°F based on an evaluation of available flange RT_{NDT} values for Westinghouse-designed plants. Because (a) the RT_{NDT} values for the NAPS, Units 1 and 2, vessel flanges and closure head flanges are well below 40°F, and (b) the RCS wide range temperature measurement uncertainty is less than 20°F, a revised reactor vessel boltup temperature of 60°F is being implemented by the attached safety evaluation [to the NAPS Summary of Facility Changes, Tests and Experiments]. The revised boltup temperature will be implemented as part of the Action Plan for Technical Specification Change Request 376A." Section 4.1 (Technical Evaluation) of the LAR states, "the reactor may be bolted up at a temperature greater than the initial RT_{NDT} of the material stressed by boltup (e.g., the vessel flange regain). An administrative minimum boltup temperature of 60°F is posed in station procedures. Therefore, the limiting boltup temperature of the closure flange region and the administrative minimum boltup temperature for NAPS, 1 and 2, of 60°F meet the requirements of Appendix G to 10 CFR Part 50.

3.3 Additional Discussion with Licensee

During its review of the proposed TS changes, the NRC Staff had an additional discussion with the licensee regarding RV nozzles, penetrations, and other discontinuities that may exhibit significantly higher stresses than those for the RV beltline shell region. This discussion is documented below.

Regarding ferritic RCPB components that are not part of the RV beltline shell region, 10 CFR Part 50, Appendix G, and Paragraph IV.A states the following:

The pressure-retaining components of the reactor coolant pressure boundary that are made of ferritic materials must meet the requirements of the [ASME Code, Section III], supplemented by the additional requirements set forth in [paragraph IV.A.2 "Pressure-Temperature Limits and Minimum Temperature Requirements"]...

Therefore, 10 CFR Part 50, Appendix G requires that P-T limits be developed for the ferritic materials in the RV beltline, as well as ferritic materials not in the RV beltline. Further, 10 CFR Part 50, Appendix G, requires that all ferritic RCPB components meet the applicable ASME Code, Section III, requirements. The relevant ASME Code, Section III, requirements that will affect the P-T limits are the lowest service temperature requirement of NB-2332(b) for piping, pumps, and valves, and the fracture toughness requirements of NB-3211(d) for vessels.

RV nozzles, penetrations, and other discontinuities may exhibit significantly higher stresses than those for the RV beltline shell region. These higher stresses can potentially result in more restrictive P-T limits, even if the RT_{NDT} for these components is not as high as that of RV beltline shell materials that have simpler geometries.

Therefore, in RAI-1 the NRC staff requested that the licensee describe how the P-T limit curves and the methodology used to develop these curves considered RV materials, consistent with the requirements of 10 CFR Part 50, Appendix G.

In its February 16, 2015 response (ADAMS Accession No. ML15051A368) to RAI-1, the licensee stated that "the axial extent of the fluence model to encompass the reactor vessel inlet and outlet nozzles" will be revised and "following completion of the fluence model revision, Dominion will be able to validate whether the inlet and outlet nozzles will have a neutron fluence of less than 1×10^{17} n/cm² at the end of the licensed operating period."

The approved P-T limit curves cover the 60-year current operating period and are applicable up to 50.3 effective full power years (EFPY) for NAPS, Unit 1, and 52.3 EFPY for NAPS, Unit 2. The NRC staff concludes that the differences in EFPY for the current operating period in comparison to the corresponding approved P-T limits provide an adequate margin so that if the revised neutron fluence model indicates that the neutron fluence exposure of the inlet and outlet nozzles is greater than 1×10^{17} n/cm² at the end of the period of extended operation, the licensee will notify the NRC accordingly and provide a schedule of revised TS P-T limits curves for NAPS, 1 and 2, if necessary.

3.4 NRC Staff's Conclusion

The NRC staff concludes that the proposed changes to the NAPS 1 and 2, TS figures 3.4.3-1 and 3.4.3-2 meet the requirements of 10 CFR Part 50, Appendix G.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Virginia State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding as published in the *Federal Register* on October 14, 2014 (79 FR 61663). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The NRC staff concludes that it is acceptable to approve the proposed license amendment to revise TS 3.4.3, "RCS Pressure and Temperature Limits," specifically TS figures 3.4.3-1 and 3.4.3-2, to include (1) the extension of the temperature axes to reflect temperatures up to RCS full power operation; (2) the extension of the pressure axes to less than 0 pounds per square inch gage (psig) to bound RCS conditions when vacuum-assist fill of the RCS loops is performed; and (3) the addition of information regarding the reactor boltup temperature. The TS changes continue to meet the requirements of 10 CFR Part 50, Appendix G. Therefore, the changes to the TSs are acceptable.

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: C. Fairbanks NRR/EVIB

Date: July 27, 2015

D. A. Heacock

- 2 -

A copy of the Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Dr. V. Sreenivas, Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-338 and 50-339

Enclosures:

1. Amendment No. 275 to NPF-4
2. Amendment No. 257 to NPF-7
3. Safety Evaluation

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NAME	JLindell	RPascarelli	VSreenivas	
DATE	07/22/15	07/27/15	07/27/15	

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