



FEB 13 2006

L-PI-06-005
10 CFR 50.90

U S Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant Units 1 and 2
Dockets 50-282 and 50-306
License Nos. DPR-42 and DPR-60

License Amendment Request (LAR) for Miscellaneous Technical Specification (TS)
Administrative Changes

Pursuant to 10 CFR 50.90, the Nuclear Management Company, LLC (NMC) hereby requests an amendment to the TS for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2 to make miscellaneous administrative changes. The proposed changes include page header and capitalization corrections in TS 3.0, "Surveillance Requirement (SR) Applicability"; and format and title corrections in TS Chapter 5.0, "Administrative Controls". NMC has evaluated the proposed changes in accordance with 10 CFR 50.92 and concluded that they involve no significant hazards consideration.

Exhibit A contains the licensee's evaluation of this LAR. Exhibit B provides a markup of TS pages. Exhibit C provides retyped TS pages.

NMC requests approval of this LAR within one calendar year of the submittal date. Upon NRC approval, NMC requests 90 days to implement the associated changes. In accordance with 10 CFR 50.91, NMC is notifying the State of Minnesota of this LAR by transmitting a copy of this letter and attachments to the designated State Official.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on

FEB 13 2006

Thomas J. Palmisano
Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2
Nuclear Management Company, LLC

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNRC
State of Minnesota

Exhibits:

- A. Licensee's Evaluation
- B. Proposed Technical Specification Changes (markup)
- C. Proposed Technical Specification Changes (retyped)

Exhibit A

LICENSEE'S EVALUATION

License Amendment Request (LAR) for Miscellaneous Technical Specification (TS) Administrative Changes

1. DESCRIPTION
2. PROPOSED CHANGE
3. BACKGROUND
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1.0 DESCRIPTION

This LAR is a request to amend Operating Licenses DPR-42 and DPR-60 for Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2.

The Nuclear Management Company, LLC (NMC) requests Nuclear Regulatory Commission (NRC) review and approval of proposed revisions to TS 3.0, "Surveillance Requirement (SR) Applicability"; and TS Chapter 5.0, "Administrative Controls". The proposed changes will improve TS usability, conformance with the industry standard, NUREG-1431, "Standard Technical Specifications, Westinghouse Plants", Revision 3.0 (NUREG-1431) and accuracy.

2.0 PROPOSED CHANGE

A brief description of the associated proposed TS changes is provided below along with a discussion of the justification for each change. The specific wording changes to the TS are provided in Exhibits B and C.

TS 3.0, "Surveillance Requirement (SR) Applicability": Currently the page header for TS 3.0, "Surveillance Requirement (SR) Applicability" is "LCO [Limiting Condition for Operation] Applicability". This header is not consistent with the contents of this TS section and is not consistent with the format guidance of NUREG-1431. This LAR proposes to use the header "SR Applicability". In the last paragraph of Section SR 3.0.4, "MODES", which is a TS defined term, is incorrectly spelled with a lower case "s". This is not consistent with the format guidance of NUREG-1431 which capitalizes defined

terms. These are administrative changes which are acceptable since they improve TS usability and conform to the format guidance of NUREG-1431.

TS Chapter 5.0, “Administrative Controls” Sections 5.5 and 5.6: This LAR proposes to make administrative changes in TS Chapter 5.0 Sections 5.5 and 5.6. In Section 5.5, the underline under “(continued)” is removed on page 5.0-10. In TS 5.6.5, “P” is deleted from the number for reference 1 which becomes “NSPNAD-8101-A”; “-P-A” is added to the number for reference 9 which becomes “WCAP-13677-P-A”; and an extra space is removed prior to the document number for references 24 and 26. These administrative changes are acceptable because they conform the TS to the format guidance of NUREG-1431 or improve the usability and accuracy of the TS.

In summary these changes are acceptable because they are administrative changes which improve TS usability or conform the TS to the format or content guidance of the applicable industry standard TS, NUREG-1431.

3.0 BACKGROUND

On July 26, 2002, the NRC issued License Amendments 158/149 which approved the NMC request to convert the PINGP TS to the format and content guidance of NUREG-1431 (conversion to improved TS). License Amendments 162/153 revised TS 5.6.5 to include references 24 and 26. License Amendments 167/157 revised portions of TS 3.0, “Surveillance Requirement (SR) Applicability”. Through subsequent review and use of these TS, NMC has identified these administrative changes.

The proposed TS changes will improve the technical accuracy and usability of the TS. The proposed changes conform the TS to the format or content guidance of the industry standard for Westinghouse plants, NUREG-1431.

4.0 TECHNICAL ANALYSIS

PINGP is a two unit plant located on the right bank of the Mississippi River approximately 6 miles northwest of the city of Red Wing, Minnesota. The facility is owned by the Northern States Power Company (NSP) and operated by the Nuclear Management Company (NMC). Each unit at PINGP employs a two-loop pressurized water reactor designed and supplied by Westinghouse Electric Corporation. The initial PINGP application for a Construction Permit and Operating License was submitted to the Atomic Energy Commission (AEC) in April 1967. The Final Safety Analysis Report (FSAR) was submitted for application of an Operating License in January 1971. Unit 1 began commercial operation in December 1973 and Unit 2 began commercial operation in December 1974.

The PINGP was designed and constructed to comply with NSP’s understanding of the

intent of the AEC General Design Criteria (GDC) for Nuclear Power Plant Construction Permits, as proposed on July 10, 1967. PINGP was not licensed to NUREG-0800, "Standard Review Plan (SRP)."

Proposed TS 3.0, "Surveillance Requirement (SR) Applicability" changes

This LAR proposes two administrative changes to TS 3.0, SR Applicability: 1) revise the page header for this TS to "SR Applicability"; and 2) change "MODES" to "MODES" on page 3.0-6. The page header in NUREG-1431 for this TS is "SR Applicability" which is consistent with the content of this TS. During the conversion to the improved TS (ITS) the page header was incorrectly formatted to be "LCO Applicability".

License Amendment (LA) 167/157 revised portions of TS 3.0, SR Applicability. During preparation of the revised TS pages for the LAR which resulted in issuance of LA 167/157, the capitalization of "MODES" on page 3.0-6 became "MODEs". The term "MODES" is defined in TS Section 1.1 and in accordance with the format and content guidance of NUREG-1431, defined terms are capitalized throughout the TS.

These administrative changes improve TS usability, accuracy and conformance to the format guidance of NUREG-1431.

Proposed TS Chapter 5.0, "Administrative Controls" Sections 5.5 and 5.6 changes

This LAR proposes four administrative changes to TS Chapter 5.0 Section 5.5 and 5.6: 1) removal of the underline under "(continued)" on page 5.0-10; 2) correction of the document number for the reference in TS 5.6.5.b.1; 3) correction of the document number for the reference in TS 5.6.5.b.9; and 4) removal of extraneous spaces in the references in TS 5.6.5.b.24 and 5.6.5.b.26. Changes 1) and 4) are minor format changes.

Changes 2) and 3) improve the accuracy of the TS and conform them to the content guidance of NUREG-1431 which requires Section 5.6.5 to identify Topical Reports by number. The actual status of these documents in references has not changed. In these references, the suffix "P" means the document is proprietary under the rules of 10CFR 2.390 and the "A" means the document has been approved by the NRC. The reference TS 3.5.6.5.b.1 has never been proprietary and thus the "P" suffix is inappropriate. The reference in TS 5.6.5.b.9 is (and always has been) proprietary, approved by the NRC and should have included the suffix "-P-A".

These administrative changes improve the usability of the TS, conform them to the format and content guidance of NUREG-1431, and do not impact plant operations. With these changes, the PINGP TS will continue to protect the health and safety of the public.

Conclusions

This LAR proposes TS changes which improve the usability and accuracy of the TS and conform the PINGP TS to the format or content guidance of NUREG-1431. Operation and maintenance of PINGP with the proposed TS revisions will continue to protect the health and safety of the public.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

The Nuclear Management Company has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

- 1. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?**

Response: No

This license amendment request proposes administrative changes to the Prairie Island Nuclear Generating Plant Technical Specifications as follows: Technical Specification 3.0, "Surveillance Requirement (SR) Applicability", revise page headers and correct capitalization; and Technical Specification Chapter 5.0, "Administrative Controls", correct Topical Report numbers and make format corrections.

The proposed changes are administrative and do not affect plant operation maintenance or testing. These changes do not affect any plant systems which are accident initiators and thus these changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

- 2. Do the proposed changes create the possibility of a new or different kind of accident from any accident previously evaluated?**

Response: No

This license amendment request proposes administrative changes to the Prairie Island Nuclear Generating Plant Technical Specifications as follows: Technical Specification 3.0, "Surveillance Requirement (SR) Applicability", revise page headers and correct capitalization; and Technical Specification Chapter 5.0, "Administrative Controls", correct Topical Report numbers and make format corrections.

The proposed changes are administrative and thus do not create new failure modes or mechanisms and do not generate new accident precursors. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

This license amendment request proposes administrative changes to the Prairie Island Nuclear Generating Plant Technical Specifications as follows: Technical Specification 3.0, "Surveillance Requirement (SR) Applicability", revise page headers and correct capitalization; and Technical Specification Chapter 5.0, "Administrative Controls", correct Topical Report numbers and make format corrections.

The proposed Technical Specification changes are administrative and do not affect plant operation, maintenance or testing. Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above, the Nuclear Management Company concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Revision 3.0

NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Revision 3.0 (NUREG-1431) provides guidance for Technical Specifications for plants with Westinghouse Nuclear Steam Supply Systems and has been approved for use by the Nuclear Regulatory Commission. The proposed Technical Specification changes are consistent with the guidance of NUREG-1431. Since the proposed changes are administrative, they do not affect plant operations and plant operation in accordance with the revised Technical Specifications will continue to protect the health and safety of the public.

Regulatory Requirements/Criteria Conclusions

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

6.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

Exhibit B

Proposed Technical Specification Changes (markup)

Technical Specification Pages

3.0-5
3.0-6
5.0-10
5.0-34
5.0-35
5.0-36

6 pages follow

3.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

SR 3.0.1 SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

SR 3.0.2 The specified Frequency for each SR is met, except for SRs with a specified Frequency of 24 months, if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

The specified Frequency is met for each SR with a specified Frequency of 24 months if the Surveillance is performed within 24 months, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

For Frequencies specified as “once,” the above interval extension (1.25 times the interval specified) does not apply.

If a Completion Time requires periodic performance on a “once per . . .” basis, the interval extension (1.25 times the interval specified) applies to each performance after the initial performance.

Exceptions to this Specification are stated in the individual Specifications.

3.0 SR APPLICABILITY (continued)

SR 3.0.3 If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is greater. This delay period is permitted to allow performance of the Surveillance. A risk evaluation shall be performed for any Surveillance delayed greater than 24 hours and the risk impact shall be managed.

If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

SR 3.0.4 Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.

This provision shall not prevent entry into MODESs or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

Removed underline

- e. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM. Determination of projected dose contributions for radioactive effluents in accordance with the methodology in the ODCM at least every 31 days;
- f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days from the liquid effluent releases would exceed 0.12 mrem to the total body or 0.4 mrem to any organ; or from the gaseous effluent releases would exceed 0.4 mrad for gamma air dose, 0.8 mrad for beta air dose, or 0.6 mrem organ dose;
- g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:
 - 1. for noble gases: a dose rate ≤ 500 mrem/yr to the whole body and a dose rate ≤ 3000 mrem/yr to the skin, and
 - 2. for iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: a dose rate ≤ 1500 mrem/yr to any organ;
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

LCO 3.2.1, “Heat Flux Hot Channel Factor ($F_Q(Z)$)”;

LCO 3.2.2, “Nuclear Enthalpy Rise Hot Channel Factor ($F_{\Delta H}^N$)”;

LCO 3.2.3, “AXIAL FLUX DIFFERENCE (AFD)”;

LCO 3.3.1, “Reactor Trip System (RTS) Instrumentation”

Overtemperature ΔT and Overpower ΔT Parameter Values for
Table 3.3.1-1;

LCO 3.4.1, “RCS Pressure, Temperature, and Flow - Departure from
Nucleate Boiling (DNB) Limits”; and

LCO 3.9.1, “Boron Concentration”.

- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:
1. NSPNAD-8101-PA, “Qualification of Reactor Physics Methods for Application to PI Units” (latest approved version);
 2. NSPNAD-8102-PA, “Prairie Island Nuclear Power Plant Reload Safety Evaluation Methods for Application to PI Units” (latest approved version);
 3. NSPNAD-97002-PA, “Northern States Power Company’s “Steam Line Break Methodology”, (latest approved version);
 4. WCAP-9272-P-A, “Westinghouse Reload Safety Evaluation Methodology”;
 5. WCAP-10054-P-A, “Westinghouse Small Break ECCS Evaluation Model using the NOTRUMP Code”;
 6. Deleted;
 7. WCAP-10924-P-A, “Westinghouse Large Break LOCA Best Estimate Methodology”;

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

8. XN-NF-77-57 (A), XN-NF-77-57, Supplement 1 (A), “Exxon Nuclear Power Distribution Control for Pressurized Water Reactors Phase II”;
9. WCAP-13677-P-A, “10 CFR 50.46 Evaluation Model Report: W-COBRA/TRAC 2-Loop Upper Plenum Injection Model Update to Support ZIRLOTM Cladding Options”;
10. NSPNAD-93003-A, “Transient Power Distribution Methodology”, (latest approved version);
11. NAD-PI-003, “Prairie Island Nuclear Power Plant Required Shutdown Margin During Physics Tests”;
12. NAD-PI-004, “Prairie Island Nuclear Power Plant $F_Q^w(Z)$ Penalty With Increasing $[F_Q^c(Z) / K(Z)]$ Trend”;
13. WCAP-10216-P-A, Revision 1A, “Relaxation of Constant Axial Offset Control/ F_Q Surveillance Technical Specification”;
14. WCAP-8745-P-A, “Design Bases for the Thermal Overpower ΔT and Thermal Overtemperature ΔT Trip Functions”;
15. WCAP-11397-P-A, “Revised Thermal Design Procedure”;
16. WCAP-14483-A, “Generic Methodology for Expanded Core Operating Limits Report”;
17. WCAP-7588 Rev. 1-A, “An Evaluation of the Rod Ejection Accident in Westinghouse Pressurized Water Reactors Using Spatial Kinetics Methods”;

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

18. WCAP-7908-A, “FACTRAN – A FORTRAN IV Code for Thermal Transients in a UO₂ Fuel Rod”;
19. WCAP-7907-P-A, “LOFTRAN Code Description”;
20. WCAP-7979-P-A, “TWINKLE – A Multidimensional Neutron Kinetics Computer Code”;
21. WCAP-10965-P-A, “ANC: A Westinghouse Advanced Nodal Computer Code”;
22. WCAP-11394-P-A, “Methodology for the Analysis of the Dropped Rod Event”;
23. WCAP-11596-P-A, “Qualification of the PHOENIX-P/ANC Nuclear Design System for Pressurized Water Reactor Cores”;
24. -WCAP-12910 Rev. 1-A, “Pressurizer Safety Valve Set Pressure Shift”;
25. WCAP-14565-P-A, “VIPRE-01 Modeling and Qualification for pressurized Water Reactor Non-LOCA Thermal-Hydraulic Safety Analysis”; and
26. -WCAP-14882-P-A, “RETRAN-02 Modeling and Qualification for Westinghouse Pressurized Water Reactor Non-LOCA Safety Analyses”.

Exhibit C

Proposed Technical Specification Changes (retyped)

Technical Specification Pages

3.0-5
3.0-6
5.0-10
5.0-34
5.0-35
5.0-36

6 pages follow

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SR 3.0.2 The specified Frequency for each SR is met, except for SRs with a specified Frequency of 24 months, if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

The specified Frequency is met for each SR with a specified Frequency of 24 months if the Surveillance is performed within 24 months, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.

For Frequencies specified as “once,” the above interval extension (1.25 times the interval specified) does not apply.

If a Completion Time requires periodic performance on a “once per . . .” basis, the interval extension (1.25 times the interval specified) applies to each performance after the initial performance.

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3.0 SR APPLICABILITY (continued)

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If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

SR 3.0.4 Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.

This provision shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

- e. Determination of cumulative dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM. Determination of projected dose contributions for radioactive effluents in accordance with the methodology in the ODCM at least every 31 days;
 - f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days from the liquid effluent releases would exceed 0.12 mrem to the total body or 0.4 mrem to any organ; or from the gaseous effluent releases would exceed 0.4 mrad for gamma air dose, 0.8 mrad for beta air dose, or 0.6 mrem organ dose;
 - g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the site boundary shall be in accordance with the following:
 - 1. for noble gases: a dose rate ≤ 500 mrem/yr to the whole body and a dose rate ≤ 3000 mrem/yr to the skin, and
 - 2. for iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days: a dose rate ≤ 1500 mrem/yr to any organ;
 - h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
 - i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
-

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

- LCO 3.2.1, “Heat Flux Hot Channel Factor ($F_Q(Z)$)”;
- LCO 3.2.2, “Nuclear Enthalpy Rise Hot Channel Factor ($F_{\Delta H}^N$)”;
- LCO 3.2.3, “AXIAL FLUX DIFFERENCE (AFD)”;
- LCO 3.3.1, “Reactor Trip System (RTS) Instrumentation”
Overtemperature ΔT and Overpower ΔT Parameter Values for
Table 3.3.1-1;
- LCO 3.4.1, “RCS Pressure, Temperature, and Flow - Departure from
Nucleate Boiling (DNB) Limits”; and
- LCO 3.9.1, “Boron Concentration”.
- b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:
1. NSPNAD-8101-A, “Qualification of Reactor Physics Methods for Application to PI Units” (latest approved version);
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9. WCAP-13677-P-A, “10 CFR 50.46 Evaluation Model Report: W-COBRA/TRAC 2-Loop Upper Plenum Injection Model Update to Support ZIRLO_{TM} Cladding Options”;
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11. NAD-PI-003, “Prairie Island Nuclear Power Plant Required Shutdown Margin During Physics Tests”;
12. NAD-PI-004, “Prairie Island Nuclear Power Plant $F_Q^w(Z)$ Penalty With Increasing $[F_Q^c(Z) / K(Z)]$ Trend”;
13. WCAP-10216-P-A, Revision 1A, “Relaxation of Constant Axial Offset Control/ F_Q Surveillance Technical Specification”;
14. WCAP-8745-P-A, “Design Bases for the Thermal Overpower ΔT and Thermal Overtemperature ΔT Trip Functions”;
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20. WCAP-7979-P-A, "TWINKLE – A Multidimensional Neutron Kinetics Computer Code";
21. WCAP-10965-P-A, "ANC: A Westinghouse Advanced Nodal Computer Code";
22. WCAP-11394-P-A, "Methodology for the Analysis of the Dropped Rod Event";
23. WCAP-11596-P-A, "Qualification of the PHOENIX-P/ANC nuclear Design System for Pressurized Water Reactor Cores";
24. WCAP-12910 Rev. 1-A, "Pressurizer Safety Valve Set Pressure Shift";
25. WCAP-14565-P-A, "VIPRE-01 Modeling and Qualification for pressurized Water Reactor Non-LOCA Thermal-Hydraulic Safety Analysis"; and
26. WCAP-14882-P-A, "RETRAN-02 Modeling and Qualification for Westinghouse Pressurized Water Reactor Non-LOCA Safety Analyses".