



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

January 19, 2012

Vice President, Operations
Entergy Nuclear Operations, Inc.
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT - ISSUANCE OF AMENDMENT RE: PRIMARY
COOLANT SYSTEM PRESSURE-TEMPERATURE LIMITS (TAC NO. ME5806)

Dear Sir or Madam:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 245 to Renewed Facility Operating License No. DPR-20 for the Palisades Nuclear Plant (PNP). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated March 7, 2011 (ADAMS Accession No. ML110730082).

The amendment revises the facility's TSs to add an applicability period of 42.1 effective full-power years to the existing pressure-temperature limit curves and low temperature overpressure protection system requirements for PNP.

A copy of our related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, appearing to read "Chawla ML".

Mahesh L. Chawla, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosures:

1. Amendment No. 245 to DPR-20
2. Safety Evaluation

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

ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-255

PALISADES NUCLEAR PLANT

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 245
License No. DPR-20

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Entergy Nuclear Operations, Inc. (the licensee), dated March 7, 2011, 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;
 - 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.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to the license amendment and Paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-20 is hereby amended to read as follows:

The Technical Specifications contained in Appendix A, as revised through Amendment No. 245, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. ENO shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Shawn Williams, Acting Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License
and Technical Specifications

Date of Issuance: January 19, 2012

ATTACHMENT TO LICENSE AMENDMENT NO. 245
RENEWED FACILITY OPERATING LICENSE NO. DPR-20

DOCKET NO. 50-255

Replace the following page of the Renewed Facility Operating License No. DPR-20 with the attached revised page. The changed area is identified by a marginal line.

REMOVE

Page 3

INSERT

Page 3

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

REMOVE

Page 3.4.3-3

Page 3.4.3-4

Page 3.4.12-4

INSERT

Page 3.4.3-3

Page 3.4.3-4

Page 3.4.12-4

- (1) Pursuant to Section 104b of the Act, as amended, and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," (a) ENP to possess and use, and (b) ENO to possess, use and operate, the facility as a utilization facility at the designated location in Van Buren County, Michigan, in accordance with the procedures and limitation set forth in this license;
 - (2) ENO, pursuant to the Act and 10 CFR Parts 40 and 70, to receive, possess, and use source and 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, as supplemented and amended;
 - (3) ENO, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use byproduct, source, and special nuclear material as sealed sources for reactor startup, reactor instrumentation, radiation monitoring equipment calibration, and fission detectors in amounts as required;
 - (4) ENO, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material for sample analysis or instrument calibration, or associated with radioactive apparatus or components; and
 - (5) ENO, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operations of the facility.
- C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations in 10 CFR Chapter I and is subject to all applicable provisions of the Act; 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) ENO is authorized to operate the facility at steady-state reactor core power levels not in excess of 2565.4 Megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.
 - (2) The Technical Specifications contained in Appendix A, as revised through Amendment No. 245, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. ENO shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) ENO shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SERs dated 09/01/78, 03/19/80, 02/10/81, 05/26/83, 07/12/85, 01/29/86, 12/03/87, and 05/19/89 and subject to the following provisions:

Renewed License No. DPR-20
Amendment No. 245

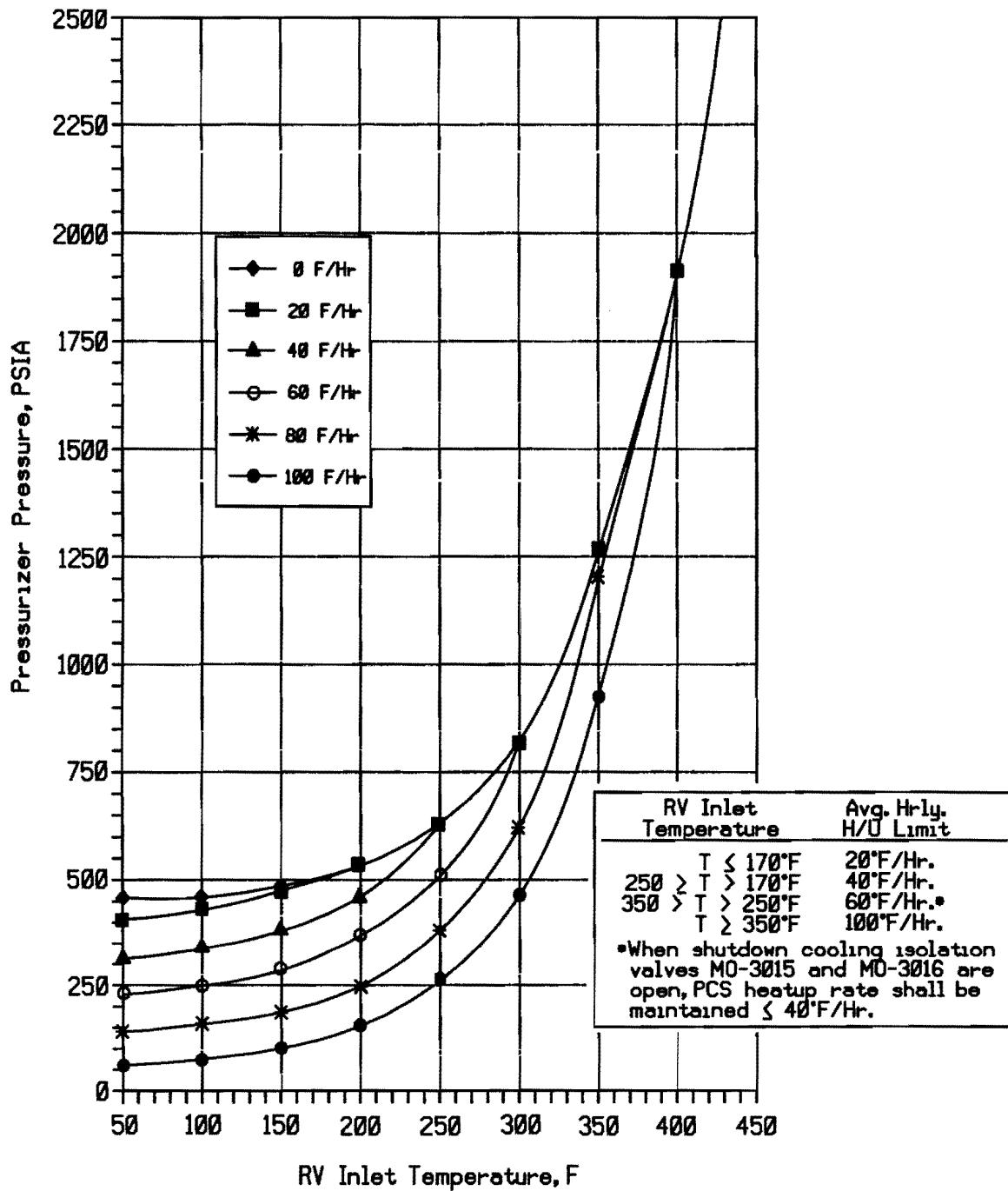


Figure 3.4.3-1 (Page 1 of 1)
Pressure – Temperature Limits for Heatups
Applicable up to 42.1 EFPY

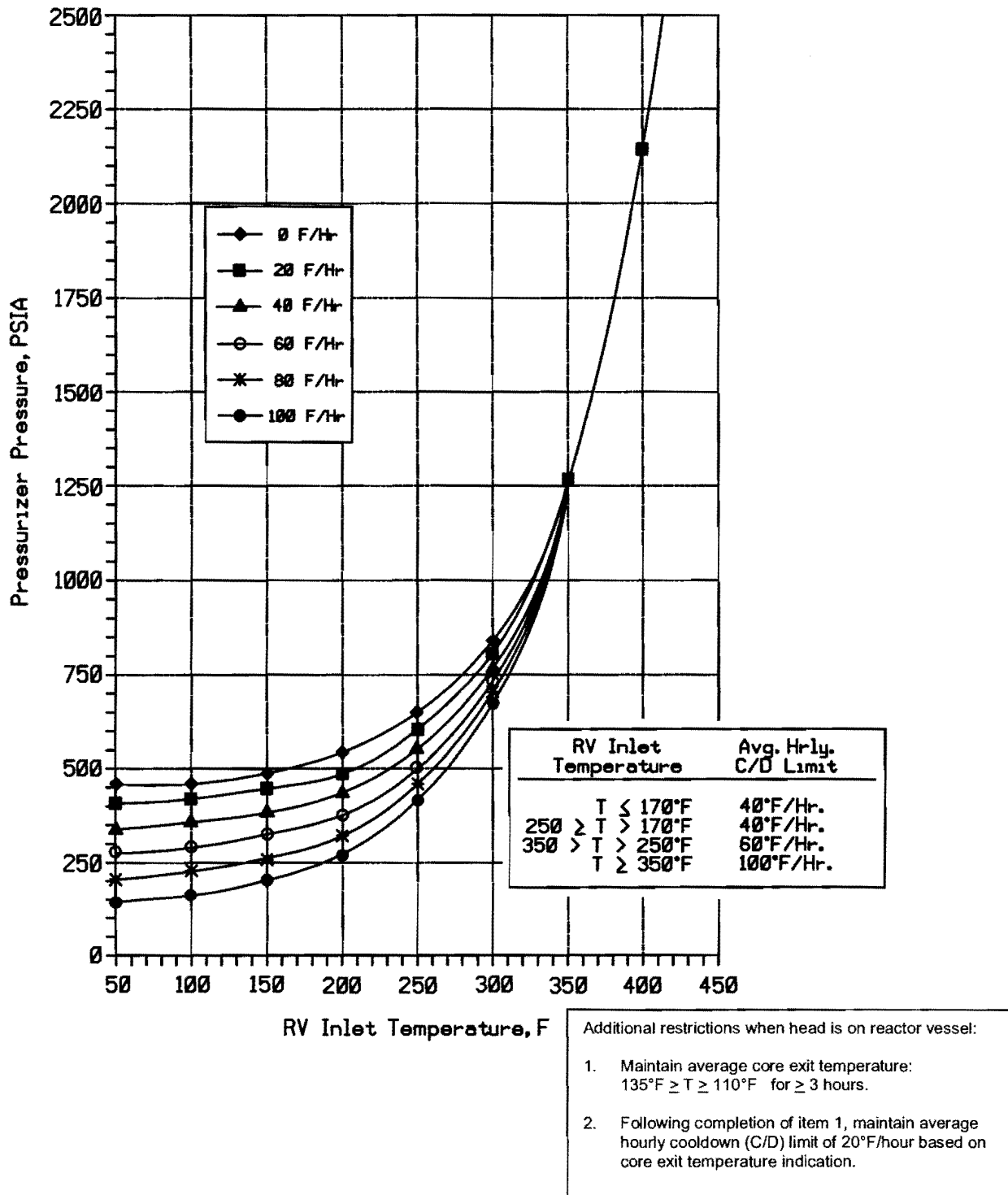


Figure 3.4.3-2 (Page 1 of 1)
Pressure – Temperature Limits for Cooldown
Applicable up to 42.1 EFPY

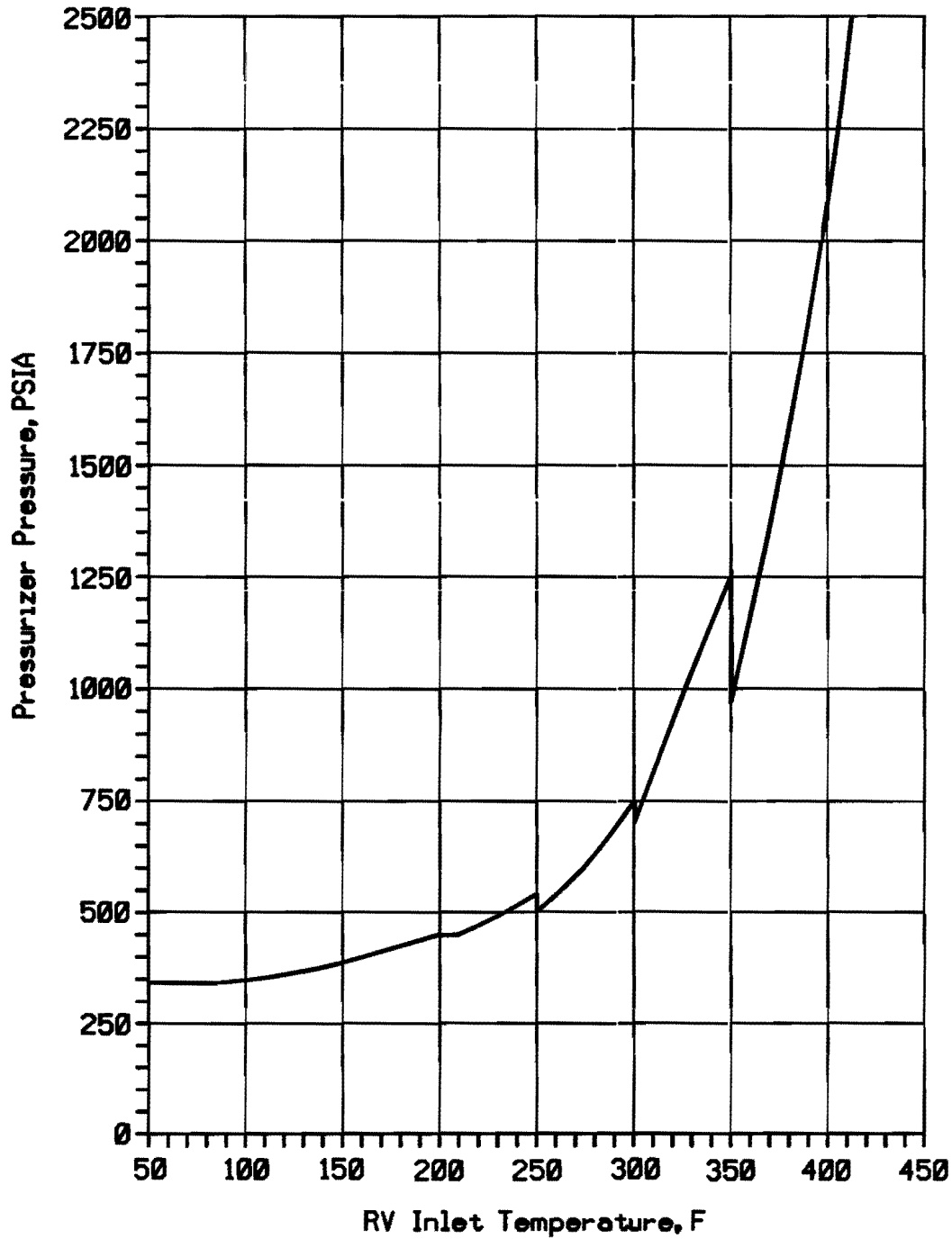


Figure 3.4.12-1 (Page 1 of 1)
LTOP Setpoint Limit
Applicable up to 42.1 EFPY



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 245 TO RENEWED

FACILITY OPERATING LICENSE NO. DPR-20

ENERGY NUCLEAR OPERATIONS, INC.

PALISADES NUCLEAR PLANT

DOCKET NO. 50-255

1.0 INTRODUCTION

By letter dated March 7, 2011, (ADAMS Accession No. ML110730082), Entergy Nuclear Operations, Inc., (ENO), the licensee for the Palisades Nuclear Plant (PNP), submitted an application for license amendment to change the facility's Technical Specifications (TS). The licensee has calculated new pressure-temperature (P-T) limit curves and low temperature overpressure protection (LTOP) system requirements (collectively referred to hereafter as the P-T limits) based on current approved Nuclear Regulatory Commission (NRC) methodology and updated surveillance capsule results and compared these new P-T limits to the existing ones contained in the TS. Given that the existing TS limits are more conservative than the new P-T limits, the licensee has proposed that the license be amended to add an applicability period of 42.1 effective full-power years (EFPY) to the current existing TS curves for PNP.

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 in nuclear power plants. The staff evaluates the P-T limits based on the following NRC regulations and guidance:

- 10 CFR Part 50, Appendix G, "Fracture Toughness Requirements";
- Generic Letter (GL) 88-11, "NRC Position on Radiation Embrittlement of Reactor Vessel Materials and Its Impact on Plant Operations";
- GL 92-01, Revision 1, "Reactor Vessel Structural Integrity";
- GL 92-01, Revision 1, Supplement 1;
- Regulatory Guide (RG) 1.99, Revision 2 (Rev. 2), "Radiation Embrittlement of Reactor Vessel Materials"; and

Enclosure

- Standard Review Plan (SRP, NUREG-0800), Branch Technical Position (BTP) Section 5-3, Revision 2.

Appendix G to 10 CFR Part 50 requires that P-T limits be at least as conservative as those obtained by applying the methodology of Appendix G to Section XI of the American Society of Mechanical Engineers (ASME) Code. Appendix G to 10 CFR Part 50 also provides minimum temperature requirements that must be considered in the development of the P-T limit curves.

GL 88-11 advised licensees that the staff would use RG 1.99, Rev. 2 to review P-T limits. RG 1.99, Rev. 2 contains methodologies for determining the increase in transition temperature and the decrease in upper-shelf energy resulting from neutron radiation. GL 92-01, Rev. 1 requested that licensees submit their reactor pressure vessel (RPV) materials property data for their plants to the staff for review. GL 92-01, Rev. 1, Supplement 1 requested that licensees provide and assess data from other licensees that could affect their RPV integrity evaluations.

The SRP, Branch Technical Position 5-3, Revision 2, "Fracture Toughness Requirements," of NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants," provides an acceptable method of determining the P-T limit curves for ferritic materials in the beltline of the RPV based on the linear elastic fracture mechanics methodology of Appendix G to Section XI of the ASME Code. The basic parameter of this methodology is the stress intensity factor K_I , which is a function of the stress state and flaw configuration. ASME Code, Section XI, Appendix G requires a safety factor of 2.0 on stress intensities resulting from pressure during normal and transient operating conditions, and a safety factor of 1.5 on these stress intensities for hydrostatic testing curves.

The flaw postulated in the ASME Code, Section XI, Appendix G has a depth that is equal to 1/4 of the RPV beltline thickness and a length equal to 1.5 times the RPV beltline thickness. The critical locations in the RPV beltline region for calculating heatup and cooldown P-T limit curves are the 1/4 thickness (1/4T) and 3/4 thickness (3/4T) locations, which correspond to the maximum depth of the postulated inside surface and outside surface defects, respectively.

The methodology found in Appendix G to Section XI of the ASME Code requires that licensees determine the adjusted reference temperature (ART or adjusted RT_{NDT}) by evaluating material property changes due to neutron irradiation. The ART is defined as the sum of the initial (unirradiated) reference temperature (initial RT_{NDT}), the mean value of the adjustment in reference temperature caused by irradiation (ΔRT_{NDT}) and a margin (M) term. The ΔRT_{NDT} is a product of a chemistry factor (CF) and a fluence factor. The CF is dependent upon the amount of copper and nickel in the material and may be determined from tables in RG 1.99, Rev. 2, or from surveillance data. The fluence factor is dependent upon the neutron fluence at the maximum postulated flaw depth. The margin term is dependent upon whether the initial RT_{NDT} is a plant-specific or a generic value and whether the CF was determined using the tables in RG 1.99, Rev. 2, or surveillance data. The margin term is used to account for uncertainties in the values of the initial RT_{NDT} , the copper and nickel contents, the neutron fluence and the calculational procedures. RG 1.99, Rev. 2, describes the methodology to be used in calculating the margin term.

3.0 TECHNICAL EVALUATION

3.1 Background

The current existing TS curves were approved in License Amendment No. 163 on March 2, 1995, (ADAMS Accession No. ML020840184), based on a limiting inner diameter (ID) neutron fluence of 2.192×10^{19} n/cm² (E>1.0 MeV). In its Safety Evaluation Report of the PNP License Renewal Application, (NUREG-1871), the NRC staff noted that the projected maximum fluence for the end of the license renewal period will be 2.998×10^{19} n/cm² (E>1.0 MeV); therefore, the current TS curves will not be valid to the end of the period of extended operation. Subsequent analyzes with the latest PNP fluence projections have shown that the applicability limit for the TS would be reached in March 2012.

The current TS P-T limits were based on a methodology and inputs that are considerably different (more conservative) than those used in the NRC-approved methods documented in WCAP-14040-A, Rev. 4, "Methodology Used to Develop Cold Overpressure Mitigating System Setpoints and [reactor coolant system] RCS Heatup and Cooldown Limit Curves."

3.2 Licensee's Evaluation

The licensee generated new P-T limits using the updated ART and neutron fluence values and the most recent NRC-approved methodologies. The main differences between the methods and inputs used to calculate the new and the current TS curves are briefly summarized below in Table 1.

Table 1. Significant differences between the new and current P-T limits.

<u>New curves</u>	<u>Current curves</u>
1. K _{IC} reference toughness	K _{IR} reference toughness
2. ASME Section XI, Appendix G	ASME Section III, Appendix G
3. RG 1.99 Rev. 2, Position 2.1 for CF	RG 1.99 Rev. 2, Position 1.1 for CF
4. Limiting Material is weld heat #W5214	Limiting Material is weld heat #27204
5. Axial defect in limiting axial weld	Axial defect in limiting circumferential weld
6. Does not use Code Case N-514* for LTOP	Does use Code Case N-514* for LTOP
7. Code Case N-641 for LTOP	Assumes LTOP of 430°F
8. Fluence projections from May 2010	Fluence projections from January 2000
9. Valid to March 24, 2031	Valid to March 2012

*allows for a 10 percent increase in pressure

The Code of record for these new curves is the 1998 Edition through the 2000 Addenda (which allows the use of the K_{IC} methodology) of ASME Code, Section XI, Appendix G, in which the equations for calculating the stress intensity factors for pressure (K_{IM}) and thermal stresses (K_{IT}) have been changed relative to those found in Appendix G of Section III to the ASME Code.

For the new P-T limits, the licensee has reevaluated the CF and ART for all of the beltline materials, taking into account all credible surveillance data and the updated fluence analysis found WCAP-15353, Supplement 1-NP, Revision 0. The chemistry factor for axial weld Heat #W5214 was calculated using Palisades surveillance Charpy data and sister plant Charpy data from Indian Point Units 2 and 3 and H. B. Robinson Unit 2. The plant-specific analysis judged the data to be not fully credible; because the scatter of ΔT_{30} versus fluence about the best fit line exceeded the one standard deviation value of 28°F (all the data points fell within the two standard deviation scatter band of 56°F for welds) therefore, the full margin term was used to calculate ART. The NRC staff approved the use of the surveillance data in the licensee's pressurized thermal shock evaluation (ADAMS Accession No. ML112310863); therefore, the staff finds it acceptable for use in determining the limiting ART value and the P-T limits.

The plant-specific CF for circumferential weld Heat #27204 was determined using Palisades surveillance Charpy data and sister plant Charpy data from Diablo Canyon Unit 1; the scatter in data was less than 28°F and is therefore, fully credible and the lower margin term is justified.

Given the updated inputs, Table 2 summarizes the approved ART evaluations for 42.1 EFPY. The limiting beltline material for the new P-T limits is the axial weld at 1/4T and 3/4 locations.

Table 2. Summary of the Approved ART Evaluations for the PNP RV Beltline Materials through 42.1 EFPY.

Material	Location	Neutron Fluence (n/cm ² , E>1 MeV)	ART (°F)
Axial weld heat #W5214	1/4T	1.275 x 10 ¹⁹	252.7*
	3/4T	0.444 x 10 ¹⁹	185.5*
Circumferential weld heat #27204	1/4T	2.024 x 10 ¹⁹	245.7**
	3/4T	0.705x 10 ¹⁹	183.0**

* includes margin of 65.5°F for not fully credible surveillance data.

** includes margin of 44.0°F for fully credible surveillance data.

Finally, the new P-T limits are generated with margin terms to account for instrument errors and with a delta pressure correction for static and dynamic head loss. These new curves are then compared to the current curves that are found in the TS (a 10 percent increase in pressure was added to the current curves to account for the use of Code Case N-514 in the current curves, but not in the new P-T curves; this factor is not used in the plant). The delta term (new P-T limit curve data point minus the current P-T limit curves + 10 percent data point) for each

temperature and rate, is always positive, ranging from a minimum of 35 pounds per square inch (psi) at 180°F and a cooling rate of 0°F/hr to a maximum of over 1400 psi at 350°F and a heating rate of 100°F/hr.

In the submittal, the licensee has shown in WCAP-17341-NP (Attachment 5 to the March 7, 2011 letter) that the current TS curves are more conservative than the new P-T limits. The licensee has chosen to keep the current TS curves and has submitted in the letter dated March 7, 2011, TS changes that add an applicability period of 42.1 EFPY to the following TS figures:

- TS Figure 3.4.3-1, "Pressure-Temperature Limits for Heatups,"
- TS Figure 3.4.3-2, "Pressure-Temperature Limits for Cooldowns," and
- TS Figure 3.4.12-1, "LTOP Setpoint Limit."

3.3 NRC Staff's Evaluation

3.3.1 Neutron Fluence

Issues related to RPV neutron fluence calculation are not discussed in this safety evaluation. The staff summarized in Table 3 the reported neutron fluence values from the 2005 license renewal application (LRA), [ADAMS Accession No. ML050940446] and the 2011 WCAP-17341-NP for the revised P-T limits. The staff noted that the projected fluences values are not the same; however, the higher values from the WCAP-17341-NP were used in the staff's evaluation and were acceptable as discussed below.

Table 3. Summary of Neutron Fluence Values ($\times 10^{19}$ n/cm², E > 1.0 MeV) for the PNP RV Beltline Materials From the PNP LRA and WCAP-17341-NP.

Material	Source	At ID	At ¼ T
Axial weld (heat #W5214)	LRA, Table 4.2-1	2.084	1.251
	WCAP-17341-NP, Table 4-1	2.161	1.275
Circumferential weld (heat #27204) and Plates	LRA, Table 4.2-1	2.998	1.800
	WCAP-17341-NP, Table 4-1	3.429	2.024

The fluence values contained in WCAP-17341-NP were based on values contained in WCAP-15353 – Supplement 1 – NP [ADAMS Accession No. ML110060695].

Regulatory Guide 1.190, "Calculational and Dosimetry Methods for Determining Pressure Vessel Neutron Fluence," (ADAMS Accession No. ML010890301) describes acceptable ways to calculate reactor vessel neutron fluence. RG 1.190 states that fluence calculations should adhere to NRC-approved methodology and provides acceptable qualification criteria.

The above-referenced supplement to WCAP-15353 describes the fluence calculations performed in support of the present request. The report stated that the neutron transport calculations were carried out using the Discrete Ordinates Radial Transport (DORT) code, and performing a three dimensional flux synthesis. The DORT code used nuclear data from the BUGLE-96 wide-group cross section library. The code also treats anisotropic scattering with a P_5 legendre expansion, and models the vessel geometry using an S_{16} order of angular quadrature. RG 1.190 recommends that, at a minimum, fluence calculations be based on BUGLE-96 nuclear data, using P_3 and S_8 approximations. The methods used in the licensee calculations are consistent with the nuclear data suggested by RG 1.190, and exceed the minimum calculational rigor suggested by RG 1.190. On this basis, the NRC staff finds the fluence calculations acceptable. The licensee-reported surveillance capsule dosimetry analysis results agree within the 20 percent uncertainty specified in RG 1.190, and on this basis the NRC staff finds that the fluence calculations are acceptably qualified.

3.3.2 ART Value and TS Curves

To assess the validity of the licensee's proposed curves, the staff first performed an independent calculation of the CF and ART values for the circumferential weld #27204 and the axial weld heat #W5214 using the methodology in RG 1.99, Revision 2. Based on these calculations, the NRC staff verified that the licensee's limiting material is axial weld heat #W5214. The staff's calculated ART values were in agreement with the licensee's calculated ART values of 252.7°F and 185.5°F for the 1/4T location and the 3/4T location, respectively, for intermediate shell axial weld heat #5214.

The staff then evaluated the new calculated TS curves in WCAP-17341-NP for acceptability by performing a limited number of independent calculations. The licensee stated that the new calculated TS curves were based on the methodologies of Appendix G of Section XI of the ASME Code, 1998 Edition with the 2000 Addenda and Code Case N-641.¹ NRC Regulatory Issue Summary 2004-04, dated April 5, 2004 [ADAMS Accession No. ML040920323], states that the ASME Section XI, Appendix G, 1998 Edition with the 2000 Addenda may be used without the need for exemption. The use of the K_{IC} fracture toughness curve is appropriate for evaluating the potential for crack initiation without imposing unnecessary conservatism in the controlled heatup and cooldown process of a RPV. The staff evaluated selected points on the cooldown and heatup curves, and the results were in agreement with the licensee's values shown in Tables 5-1 and 5-2 from WCAP-17341-NP.

The staff examined the comparisons in Figures 6-1 through 6-4 of WCAP-17341-NP between the new calculated P-T curves (including a margin to account for delta pressure correction of 35 psi when the temperature is below 300°F and 54 psi for higher temperatures), but with no margin for instrument errors, and the existing TS curves. The staff's comparison showed that the existing curves are more conservative because the allowable pressure for each temperature for the current P-T curves is less than or equal to the allowable pressure for the new P-T curves. Since the new P-T limits are equally or more conservative to P-T limits generated using the 1998 edition through 2000 addenda of the ASME Code, Section XI, Appendix G, which is incorporated by reference in 10 CFR 50.55a, these P-T limits would be acceptable per

¹ Code Case N-641 allows an LTOP enable temperature of $RT_{NDT} + 40^\circ\text{F}$ for assumed axial surface flaws in axial welds and plates, and $RT_{NDT} - 85^\circ\text{F}$ for assumed circumferential flaws in circumferential welds.

10 CFR 50, Appendix G. However, since the licensee elected to continue to use its existing TS P-T limits, which are more conservative than the new P-T curves, the existing TS limits are, by definition, more conservative than the limits that would be generated using the ASME Code, Section XI, Appendix G, and are therefore acceptable. The additional conservatism of the existing curves relative to the new P-T curves is mainly due to the fact that the use of K_{IC} was not allowed in the edition of the ASME Code used to generate the existing curves. The staff also found that the minimum temperature requirements of Table 1 of Appendix G to 10 CFR Part 50 were properly implemented in the P-T limit curves. Therefore, the staff verified that the licensee's proposed P-T limits are in accordance with Appendix G to Section XI of the ASME Code and satisfy the requirements of Appendix G to 10 CFR Part 50.

3.3.3 Low Temperature Overpressure Protection (LTOP)

The LTOP system, provided by the power operated relief valves and also by the shut down cooling relief valves, prevents RCS overpressurization below certain temperatures, thus maintaining reactor coolant pressure boundary integrity. The LTOP analysis determines the Limiting Conditions for Operation that ensures the low-temperature structural integrity for the period of applicability.

The NRC staff reviewed the LTOP analysis contained in Appendix B of WCAP-17341-NP using the guidance in ASME Code Case N-641, "Alternative Pressure-Temperature Relationship and Low Temperature Overpressurization Protection System Requirements Section XI Division 1." The new, calculated LTOP enabling temperature is 313.2°F based on the criteria specified in Code Case N-641. The current LTOP enabling temperature is applicable when any system cold leg temperature is below 430°F, i.e., more conservative than the new value that is calculated in WCAP-17341-NP. The LTOP setpoint is unaffected by this proposed license amendment, and remains at 315 pounds per square inch absolute. Therefore, the NRC staff agrees that the current LTOP enabling temperature is more conservative and concludes that the requested addition of the 42.1 EFPY applicability period to the LTOP curve is acceptable.

4.0 SUMMARY

The staff concludes that the licensee's current TS P-T limits, are acceptable with the proposed addition of an applicability period of 42.1 EFPY, because the current P-T limits are equally or more conservative than the P-T limits that would be generated using an edition and addenda of the ASME Code, Section XI, that is acceptable to the NRC staff, thus meeting the requirements of 10 CFR 50, Appendix G. Hence, the proposed additions to the TS may be incorporated into the PNP TS and are valid through 42.1 EFPY.

5.0 STATE CONSULTATION

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

6.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or change the

surveillance requirements. The NRC staff has determined that the amendment involves 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 amendment involves no significant hazards consideration and there has been no public comment on such finding (76 FR 28472). Accordingly, the amendment meets 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 amendment.

7.0 CONCLUSION

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) 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.

Principal Contributors: P. Purtscher
B. Parks

Date: January 19, 2012

January 19, 2012

Vice President, Operations
Entergy Nuclear Operations
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES NUCLEAR PLANT - ISSUANCE OF AMENDMENT RE: PRIMARY COOLANT SYSTEM PRESSURE-TEMPERATURE LIMITS (TAC NO. ME5806)

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A copy of our related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,
IRA

Mahesh L. Chawla, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosures:

1. Amendment No. 245 to DPR-20
2. Safety Evaluation

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ADAMS Accession No. **ML113480303**

OFFICE	LPL3-1/PM	LPL3-1/LA	EVIB/BC(A)	SRXB/BC	OGC /NLO w/comments	LPL3-1/BC(A)	LPL3-1/PM
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DATE	01/05/12	12/28/11	12/01/11*	01/09/12	01/10/12	01/19/12	01/19/12

*Safety evaluation transmitted by memo of 12/1/11 (Accession No. ML113400231).

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