

A CMS Energy Company

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January 7, 2000

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

**DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT  
TECHNICAL SPECIFICATIONS CHANGE REQUEST  
COLR REFERENCES AND Pa - IMPROVED TECHNICAL SPECIFICATIONS PAGES**


On October 29, 1999, Consumers Energy Company requested a change to the Palisades Technical Specifications (TS), which 1) revised the peak calculated containment internal pressure, P<sub>a</sub>, listed in Section 6.5.14, Containment Leak Rate Testing Program, and 2) revised the list of methodology documents in Section 6.6.5, Core Operating Limits Report. Those changes were approved on November 15, 1999, and were issued as Amendment 188 to the Palisades Facility Operating License.

Since the Palisades Improved Technical Specifications (ITS) conversion was in the final stages of approval at that time, discussions with the NRR Palisades Project Manager determined that the corresponding ITS pages, which incorporate the changes made by Amendment 188, should be submitted at a later date. The enclosure to this letter provides those revised ITS pages.

We request that the NRC re-issue the affected ITS pages.

**SUMMARY OF COMMITMENTS**

This letter establishes no new commitments. It completes the commitment, made in our October 29, 1999 letter, to submit corresponding changes for the Palisades ITS.

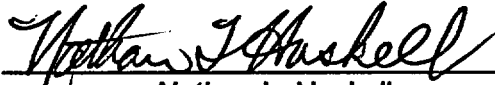
  
Nathan L. Haskell  
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CC: Administrator, Region III, USNRC  
Project Manager, NRR, USNRC  
NRC Resident Inspector - Palisades  
Dennis R. Hahn, Michigan Department of Environmental Quality

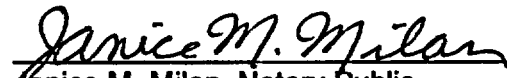
**CONSUMERS ENERGY COMPANY**

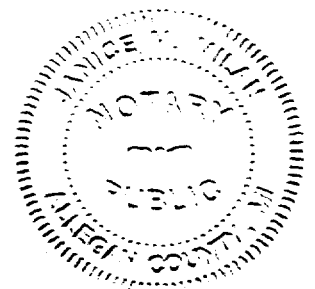
**TECHNICAL SPECIFICATIONS CHANGE REQUEST**

To the best of my knowledge, the content of this letter providing Improved Technical Specifications pages which incorporate the changes approved in Amendment 188, is truthful and complete.

  
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Nathan L. Haskell  
Director, Licensing

Sworn and subscribed to before me this 7th day of January 2000

  
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Janice M. Milan, Notary Public  
Allegan County, Michigan  
(Acting in Van Buren County, Michigan)  
My commission expires September 6, 2003



**ENCLOSURE**

**CONSUMERS ENERGY COMPANY  
PALISADES PLANT  
DOCKET 50-255**

**IMPROVED TECHNICAL SPECIFICATIONS PAGES  
REVISED Pa AND COLR REFERENCES**

**5.6 Reporting Requirements**

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**5.6.4 Monthly Operating Report**

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the NRC no later than the fifteenth of each month following the calendar month covered by the report.

**5.6.5 CORE OPERATING LIMITS REPORT (COLR)**

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

- 3.1.1 Shutdown Margin
- 3.1.6 Regulating Rod Group Position Limits
- 3.2.1 Linear Heat Rate Limits
- 3.2.2 Radial Peaking Factor Limits
- 3.2.4 ASI Limits

b. The analytical methods used to determine the core operating limits shall be those approved by the NRC, specifically those described in the latest approved revision of the following documents:

1. EMF-96-029(P)(A) Volumes 1 and 2, "Reactor Analysis System for PWRs," Siemens Power Corporation. (LCOs 3.1.1, 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
2. ANF-84-73 Appendix B (P)(A), "Advanced Nuclear Fuels Methodology for Pressurized Water Reactors: Analysis of Chapter 15 Events," Advanced Nuclear Fuels Corporation. (Bases report not approved) (LCOs 3.1.1, 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
3. XN-NF-82-21(P)(A), "Application of Exxon Nuclear Company PWR Thermal Margin Methodology to Mixed Core Configurations," Exxon Nuclear Company. (LCOs 3.2.1, 3.2.2, & 3.2.4)
4. EMF-84-093(P)(A), "Steam Line Break Methodology for PWRs," Siemens Power Corporation. (LCOs 3.1.1, 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
5. XN-75-32(P)(A) Supplements 1 through 4, "Computational Procedure for Evaluating Fuel Rod Bowing," Exxon Nuclear Company. (Bases document not approved) (LCOs 3.1.6, 3.2.1, 3.2.2, & 3.2.4)

5.6 Reporting Requirements

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6.6.5 COLR (continued)

6. EXEM PWR Large Break LOCA Evaluation Model as defined by:  
(LCOs 3.1.6, 3.2.1, & 3.2.2)
  - a) XN-NF-82-20(P)(A) Supplement 2, "Exxon Nuclear Company Evaluation Model EXEM/PWR ECCS Model Updates," Exxon Nuclear Company.
  - b) XN-NF-82-20(P)(A) Supplements 1, 3, and 4, "Exxon Nuclear Company Evaluation Model EXEM/PWR ECCS Model Updates," Advanced Nuclear Fuels Corporation.
  - c) XN-NF-82-07(P)(A), "Exxon Nuclear Company ECCS Cladding Swelling and Rupture Model," Exxon Nuclear Company.
  - d) XN-NF-81-58(P)(A) Supplements 1 and 2, "RODEX2 Fuel Rod Thermal-Mechanical Response Evaluation Model," Exxon Nuclear Company.
  - e) ANF-81-58(P)(A) Supplements 3 and 4, "RODEX2 Fuel Rod Thermal Mechanical Response Evaluation Model," Advanced Nuclear Fuels Corporation.
  - f) XN-NF-85-16(P)(A) Volume 1 and Supplements 1, 2, and 3; Volume 2, and Supplement 1, "PWR 17x17 Fuel Cooling Tests Program," Advanced Nuclear Fuels Corporation.
  - g) XN-NF-85-105(P)(A) and Supplement 1, "Scaling of FCTF Based Reflood Heat Transfer Correlation for Other Bundle Designs," Advanced Nuclear Fuels Corporation.
7. XN-NF-78-44(NP)(A), "A Generic Analysis of the Control Rod Ejection Transient for Pressurized Water Reactors," Exxon Nuclear Company. (LCOs 3.1.6, 3.2.1, & 3.2.2)
8. ANF-89-151(P)(A), "ANF-RELAP Methodology for Pressurized Water Reactors: Analysis of Non-LOCA Chapter 15 Events," Advanced Nuclear Fuels Corporation.  
(LCOs 3.1.6, 3.2.1, 3.2.2, & 3.2.4)

**5.6 Reporting Requirements**

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**6.6.5 COLR (continued)**

9. EMF-92-153(P)(A) and Supplement 1, "HTP: Departure from Nucleate Boiling Correlation for High Thermal Performance Fuel," Siemens Power Corporation. (LCOs 3.2.1, 3.2.2, & 3.2.4)
  10. XN-NF-621(P)(A), "Exxon Nuclear DNB Correlation for PWR Fuel Designs," Exxon Nuclear Company. (LCOs 3.2.1, 3.2.2, & 3.2.4)
  11. XN-NF-82-06(P)(A) and Supplements 2, 4, and 5, "Qualification of Exxon Nuclear Fuel for Extended Burnup," Exxon Nuclear Company. (LCOs 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
  12. ANF-88-133(P)(A) and Supplement 1, "Qualification of Advanced Nuclear Fuels' PWR Design Methodology for Rod Burnups of 62 GWD/MTU," Advanced Nuclear Fuels Corporation. (LCOs 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
  13. XN-NF-85-92(P)(A), "Exxon Nuclear Uranium Dioxide/Gadolinia Irradiation Examination and Thermal Conductivity Results," Exxon Nuclear Company. (LCOs 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
  14. EMF-92-116(P)(A), "Generic Mechanical Design Criteria for PWR Fuel Designs," Siemens Power Corporation. (LCOs 3.1.6, 3.2.1, 3.2.2, & 3.2.4)
  15. EMF-2087(P)(A), "SEM/PWR-98: ECCS Evaluation Model for PWR LBLOCA Applications," Siemens Power Corporation. (LCOs 3.1.6, 3.2.1, & 3.2.2)
  16. ANF-87-150 Volume 2, "Palisades Modified Reactor Protection System Report: Analysis of Chapter 15 Events," Advanced Nuclear Fuels Corporation. [Approved for use in the Palisades design during the NRC review of license Amendment 118, November 15, 1988] (LCOs 3.1.6, 3.2.1, & 3.2.2)
- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems limits, nuclear limits such as shutdown margin, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any mid cycle revisions or supplements, shall be provided, upon issuance for each reload cycle, to the NRC.

**5.6 Reporting Requirements**

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**5.6.6 Post Accident Monitoring Report**

When a report is required by LCO 3.3.7, "Post Accident Monitoring Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels to OPERABLE status.

**5.6.7 Containment Structural Integrity Surveillance Report**

Reports shall be submitted to the NRC covering Prestressing, Anchorage, and Dome Delamination tests within 90 days after completion of the tests.

**5.6.8 Steam Generator Tube Surveillance Report**

The following reports shall be submitted to the Commission following each inservice inspection of steam generator tubes:

- a. The number of tubes plugged in each steam generator shall be reported to the Commission within 15 days following the completion of each inspection, and
- b. The complete results of the steam generator tube inservice inspection shall be reported to the Commission within 12 months following completion of the inspection. This report shall include:
  1. Number and extent of tubes inspected.
  2. Location and percent of wall-thickness penetration for each indication of an imperfection.
  3. Identification of tubes plugged.
- c. Results of steam generator tube inspections that fall into Category C-3 shall require 24 hour verbal notification to the NRC prior to resumption of plant operation. A written followup within the next 30 days shall provide a description of investigations and corrective measures taken to prevent recurrence.