

December 8, 2000

10 CFR 50.90

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

**DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT**  
**TECHNICAL SPECIFICATION CHANGE REQUEST REGARDING ELIMINATION OF**  
**POST-ACCIDENT SAMPLING SYSTEM REQUIREMENTS**

A request for changes to the Palisades Technical Specifications (TS) to eliminate post-accident sampling system (PASS) requirements is enclosed. The changes implement improvements to "Standard Technical Specifications Combustion Engineering Plants," NUREG-1432, covered by Technical Specification Task Force (TSTF) change 366, "Elimination of Requirements for a Post Accident Sampling System." The availability of this Technical Specification improvement was announced in the Federal Register on October 31, 2000 as part of the Consolidated Line Item Improvement Process (CLIIP). A description of the proposed TS change, and the requested confirmation of applicability and plant-specific verifications and commitments are provided in Enclosure 1. Enclosure 2 provides the revised TS and Bases pages, and Enclosure 3 provides marked-up pages showing the change to the TS and Bases.

Consumers Energy requests approval of this Technical Specification Change no later than March 1, 2001. It is requested that 60 days be allowed for implementation following license amendment approval.

In accordance with 10 CFR 50.91, a copy of this letter has been sent to the appropriate official of the State of Michigan.

**SUMMARY OF COMMITMENTS**

This letter contains three new commitments and revises (by elimination) all previous commitments regarding the NUREG 0737 requirements for a post accident sampling system. The new commitments associated with elimination of PASS requirements from the Palisades TS are:

1. Consumers Energy will develop, implement and maintain contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant,

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containment sump fluid, and containment atmosphere. These plans will be contained in emergency plan implementing procedures and be available for use during an accident. Such plans will be available prior to implementation of the requested TS change.

2. Consumers Energy will develop, implement and maintain the capability for classifying fuel damage events at the Alert level threshold. This capability may utilize the normal sampling system or correlate normal sample system dose rates to coolant radioisotope concentrations. This capability will be described in appropriate Palisades Plant emergency plan implementing procedures, which will be available prior to implementation of the requested TS change.
3. Consumers Energy has and will maintain the capability to monitor radioactive iodines that may have been released to offsite environs. This capability is described in appropriate Palisades Plant emergency plan implementing procedures.



Nathan L. Haskell,  
Director, Licensing and Performance Assessment

CC Administrator, Region III, USNRC  
Project Manager, NRR, USNRC  
NRC Resident Inspector - Palisades

Enclosures

## CONSUMERS ENERGY COMPANY

To the best of my knowledge, the content of this License Amendment Request, which proposes changes to the Palisades Technical Specifications regarding elimination of post accident sampling system requirements, is truthful and complete.

By Nathan L. Haskell  
Nathan L. Haskell  
Director, Licensing and Performance Assessment

Sworn and subscribed to before me this 8<sup>th</sup> day of December 2000.

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

**ENCLOSURE 1**

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

**December 8, 2000**

**TECHNICAL SPECIFICATION CHANGE REQUEST - LICENSE DPR-20  
ELIMINATION OF POST-ACCIDENT SAMPLING SYSTEM REQUIREMENTS**

**5 Pages**

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**1.0 INTRODUCTION**

It is requested that the Technical Specifications (TS) contained in the Facility Operating License DPR-20, Docket 50-255, for the Palisades Plant be changed as described below, to eliminate requirements for a post accident sampling system (PASS).

Enclosure 2 contains the proposed TS and Bases pages. Only the pages affected by the requested change are included, and the changed areas are marked with a vertical line in the right margin. Enclosure 3 contains the current TS and Bases pages marked-up to show the proposed changes.

**2.0 PROPOSED TS CHANGES - DESCRIPTION AND BASIS**

**2.1 Description of TS and Bases Changes**

The following changes are proposed:

1. TS section 5.5.3, Post Accident Sampling Program, will be deleted in its entirety.
2. TS Bases for Condition D.1 of LCO 3.3.7, regarding the allowed completion time for restoring a containment hydrogen monitor to operable status, will be revised to eliminate reference to the PASS, as shown on the enclosed pages.

**2.2 Basis for Proposed Changes**

These changes implement improvements to "Standard Technical Specifications Combustion Engineering Plants", NUREG-1432, covered by Technical Specification Task Force (TSTF) change 366, Revision 0. This TSTF determined that the requirement for a post accident sampling system (PASS) may be eliminated based on the implementation of Topical Report CE NPSD-1157, Revision 1, "Technical Justification for the Elimination of the Post-Accident Sampling System from the Plant Design and Licensing Basis for CE OG Utilities," and the associated NRC Safety Evaluation dated May 16, 2000. Requirements for a PASS were originally promulgated following the TMI-2 event in 1979. An NRC order dated March 14, 1983 confirmed Consumers Energy's commitment to establish a PASS meeting the guidelines of NUREG 0737. Consumers Energy has complied with the order.

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The availability of this Technical Specification improvement was announced in the Federal Register on October 31, 2000 as part of the Consolidated Line Item Improvement Process (CLIIP). The notice provided the Staff's Safety Evaluation and a no significant hazards consideration determination for use by Licensees in verifying that the subject changes and justifications applied to their facilities.

**3.0 APPLICABILITY OF PUBLISHED SAFETY EVALUATION**

Consumers Energy has reviewed the Safety Evaluation published in the Federal Register on October 31, 2000 as part of the CLIIP. This verification included a review of the NRC staff's Safety Evaluation, determination of No Significant Hazards Consideration, and determination of categorical exclusion as set forth in 10 CFR 51.22(c)(9), as well as the information provided to support the TSTF (i.e., Combustion Engineering Owners Group (CEOG) topical report CE NPSD-1157, "Technical Justification for the Elimination of a Post Accident Sampling System from the Plant Design and Licensing Basis for CEOG Utilities," submitted May 5, 1999 and supplemented on April 14, 2000). In addition, Consumers Energy reviewed the NRC Safety Evaluation for CE NPSD-1157, dated May 16, 2000 (TAC NO. MA5661). We have concluded that the justifications presented in the TSTF and the Safety Evaluations prepared by the NRC staff are applicable to Palisades, except as noted below, and justify this request to incorporate the noted change into the Palisades TS.

Note 2 of the October 31, 2000 NRC Safety Evaluation (SE) identified three other potential TS changes for which the staff provided discussion. For Palisades, applicability is as follows:

- a. Editorial changes - there are no editorial changes required to the Palisades TS to account for the change covered in this request.
- b. Mention of PASS as a potential leakage source outside containment - Palisades TS 5.5.2 provides for a program to minimize leakage to the engineered safeguards rooms from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. The list of Palisades systems included in this TS does not include PASS. Therefore, that portion of the NRC SE that addresses this issue is not applicable to this request.

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- c. Bases changes for TS 3.3.7, "Post Accident Monitoring Instrumentation" - Consumers Energy has provided with this request the Bases change to B3.3.7 that is necessary to account for elimination of PASS.

**4.0 VERIFICATIONS AND COMMITMENTS**

As recommended in the Federal Register notice of availability for this Technical Specification improvement, Consumers Energy offers the following plant-specific verifications and commitments.

1. Consumers Energy will develop, implement and maintain contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. These plans will be contained in emergency plan implementing procedures and be available for use during an accident. Such plans will be available prior to implementation of the requested TS change.
2. Consumers Energy will develop, implement and maintain the capability for classifying fuel damage events at the Alert level threshold. This capability may utilize the normal sampling system or correlate normal sample system dose rates to coolant radioisotope concentrations. This capability will be described in appropriate Palisades Plant emergency plan implementing procedures, which will be available prior to implementation of the requested TS change.
3. Consumers Energy has and will maintain the capability to monitor radioactive iodines that may be released to offsite environs during an accident. This capability is described in appropriate Palisades Plant emergency plan implementing procedures.

**5.0 PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION**

Consumers Energy has reviewed the proposed no significant hazards determination published in the Federal Register on October 31, 2000 as part of the CLIIP. We have concluded that the proposed determination presented in the notice is applicable to the Palisades Plant, and hereby incorporate, by reference, that determination to satisfy the requirements of 10 CFR 50.92(a).

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**6.0 ENVIRONMENTAL EVALUATION**

Consumers Energy Company has reviewed the environmental evaluation included in the model safety evaluation published on October 31, 2000 as part of the CLIP. We have concluded the staff's findings presented in that evaluation are applicable to the Palisades Plant and the evaluation is hereby incorporated by reference for this application.

**7.0 CONCLUSION**

The Palisades Plant Review Committee has reviewed this TS Change Request and has determined that proposing these changes does not involve a significant hazards consideration. This change has been reviewed by the Nuclear Performance Assessment Department.

**ENCLOSURE 2**

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

**December 8, 2000**

**TECHNICAL SPECIFICATION CHANGE REQUEST - LICENSE DPR-20  
ELIMINATION OF POST-ACCIDENT SAMPLING SYSTEM REQUIREMENTS**

**REVISED TECHNICAL SPECIFICATIONS  
PAGE 5.0-8  
AND  
TECHNICAL SPECIFICATIONS BASES  
PAGE B 3.3.7-9**

**3 Pages**

## 5.5 Programs and Manuals

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### 5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage to the engineered safeguards rooms, from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident, to as low as practical. The systems include the Containment Spray System, the Safety Injection System, the Shutdown Cooling System, and the containment sump suction piping. This program shall include the following:

- a. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
- b. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.
- c. The portion of the shutdown cooling system that is outside the containment shall be tested either by use in normal operation or hydrostatically tested at 255 psig.
- d. Piping from valves CV-3029 and CV-3030 to the discharge of the safety injection pumps and containment spray pumps shall be hydrostatically tested at no less than 100 psig.
- e. The maximum allowable leakage from the recirculation heat removal systems' components (which include valve stems, flanges and pump seals) shall not exceed 0.2 gallon per minute under the normal hydrostatic head from the SIRW tank (approximately 44 psig).

### 5.5.3 Post Accident Sampling Program

[deleted]

BASES

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ACTIONS  
(continued)

B.1

This Required Action specifies initiation of actions in accordance with Specification 5.6.6, which requires a written report to be submitted to the Nuclear Regulatory Commission. This report discusses the results of the root cause evaluation of the inoperability and identifies proposed restorative Required Actions. This Required Action is appropriate in lieu of a shutdown requirement, given the likelihood of plant conditions that would require information provided by this instrumentation. Also, alternative Required Actions are identified before a loss of functional capability condition occurs.

C.1

When one or more Functions have two required channels inoperable (i.e., two channels inoperable in the same Function), one channel in the Function should be restored to OPERABLE status within 7 days. The Completion Time of 7 days is based on the relatively low probability of an event requiring PAM instrumentation operation and the availability of alternate means to obtain the required information. Continuous operation with two required channels inoperable in a Function is not acceptable because the alternate indications may not fully meet all performance qualification requirements applied to the PAM instrumentation. Therefore, requiring restoration of one inoperable channel of the Function limits the risk that the PAM Function will be in a degraded condition should an accident occur.

Condition C is modified by a Note which indicates it is not applicable to hydrogen monitor channels.

D.1

Condition D applies when two hydrogen monitor channels are inoperable. Required Action D.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on other core damage assessment capabilities available to provide information for operator decisions. Also, it is unlikely that a LOCA (which would cause core damage) would occur during this time.

**ENCLOSURE 3**

**CONSUMERS ENERGY COMPANY  
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**December 8, 2000**

**TECHNICAL SPECIFICATION CHANGE REQUEST - LICENSE DPR-20  
ELIMINATION OF POST-ACCIDENT SAMPLING SYSTEM REQUIREMENTS**

**MARK-UP PAGES FOR  
REVISED TECHNICAL SPECIFICATIONS  
PAGE 5.0-8  
AND  
TECHNICAL SPECIFICATIONS BASES  
PAGE B 3.3.7-9**

**3 Pages**

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- a. Provisions establishing preventive maintenance and periodic visual inspection requirements, and
- b. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals.
- c. The portion of the shutdown cooling system that is outside the containment shall be tested either by use in normal operation or hydrostatically tested at 255 psig.
- d. Piping from valves CV-3029 and CV-3030 to the discharge of the safety injection pumps and containment spray pumps shall be hydrostatically tested at no less than 100 psig.
- e. The maximum allowable leakage from the recirculation heat removal systems' components (which include valve stems, flanges and pump seals) shall not exceed 0.2 gallon per minute under the normal hydrostatic head from the SIRW tank (approximately 44 psig).

### 5.5.3 Post Accident Sampling Program

~~[deleted] This program provides controls which will ensure the capability to accurately determine the airborne iodine concentration in vital areas and which will ensure the capability to obtain and analyze reactor coolant, radioactive gases and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. This program shall include the following:~~

- ~~a. Training of personnel,~~
- ~~b. Procedures for sampling and analysis, and~~
- ~~c. Provisions for maintenance of sampling and analytic equipment.~~

BASES

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ACTIONS  
(continued)

B.1

This Required Action specifies initiation of actions in accordance with Specification 5.6.6, which requires a written report to be submitted to the Nuclear Regulatory Commission. This report discusses the results of the root cause evaluation of the inoperability and identifies proposed restorative Required Actions. This Required Action is appropriate in lieu of a shutdown requirement, given the likelihood of plant conditions that would require information provided by this instrumentation. Also, alternative Required Actions are identified before a loss of functional capability condition occurs.

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When one or more Functions have two required channels inoperable (i.e., two channels inoperable in the same Function), one channel in the Function should be restored to OPERABLE status within 7 days. The Completion Time of 7 days is based on the relatively low probability of an event requiring PAM instrumentation operation and the availability of alternate means to obtain the required information. Continuous operation with two required channels inoperable in a Function is not acceptable because the alternate indications may not fully meet all performance qualification requirements applied to the PAM instrumentation. Therefore, requiring restoration of one inoperable channel of the Function limits the risk that the PAM Function will be in a degraded condition should an accident occur.

Condition C is modified by a Note which indicates it is not applicable to hydrogen monitor channels.

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Condition D applies when two hydrogen monitor channels are inoperable. Required Action D.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on other core damage assessment capabilities available the backup capability of the Post Accident Sampling System to monitor the hydrogen concentration for ~~evaluation of core damage~~ and to provide information for operator decisions. Also, it is unlikely that a LOCA (which would cause core damage) would occur during this time.